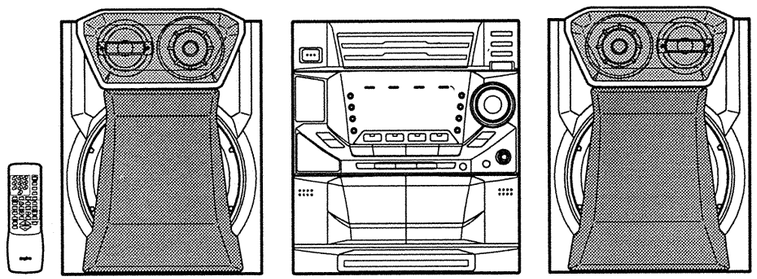
SANYO

FILE NO.

Service Manual

Mini Component System

DC-C70 (UK) (XE)



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PRODUCT CODE No.
129 560 03 (UK)
129 560 04 (XE)

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This service manual consists of "DC-C70U" (Main unit : 129 559 03 [UK], 129 559 04 [XE]), "RB-C30AR [UK] RB-C30ARD [XE]" (Remote control), "SX-C70L" (Speaker system : 133 697 02 [UK], 133 697 04 [XE]) and "SX-C70R" (Speaker system : 133 698 02 [UK], 133 698 04 [XE]).

REFERENCE No. SM5810038

SPECIFICATIONS

Tuner section
Reception frequency
FM ..... 87.5 MHz - 108.0 MHz
MW ..... 522 kHz - 1611 kHz
LW ..... 144 kHz - 288 kHz

Cassette deck section
Track system ..... 4-track, 2-channel stereo
Frequency response ..... 120 Hz - 14 kHz (Normal tape)
Signal to noise ratio ..... 48 dB
Wow and Flutter ..... 0.12 % (WRMS)
Fast forward / Rewind time .... Approx. 110 sec. (C-60)

CD changer section
Type ..... Changer, 3-disc
Channels ..... 2-channel stereo
Sampling frequency ..... 44.1 kHz
Pick-up ..... Optical 3-beam semiconductor laser
Wow and Flutter ..... Below measurable limits

General
Output power ..... 100 W x 2 (at 6 ohms, 10% distortion)
Inputs
VIDEO / DVD IN ..... 550 mV / 50k ohms
Outputs
SPEAKERS ..... 6 ohms
PHONES ..... 8 - 32 ohms
OPT.(DIGITAL) OUT ..... Optial
Power requirements ..... AC 230 V, 50 Hz
Power consumption ..... 120 W
Dimensions (W x H x D) ..... Approx. 270 x 300 x 321 mm
Weight ..... Approx. 6.8 kg

SX-C70 Speaker systems
Type ..... 3 way bass reflex
Unit used ..... Woofer : 16cm cone type
Mid range : 6cm cone type
Tweeter : 5cm cone type
Maximum
Power-handling capacity ..... 180 W (peak)
Nominal impedance ..... 6 ohms
Dimensions (W x H x D) ..... Approx. 240 x 315 x 282 mm
Weight ..... Approx. 3.9 kg (per speaker)

Specifications subject to change without notice.

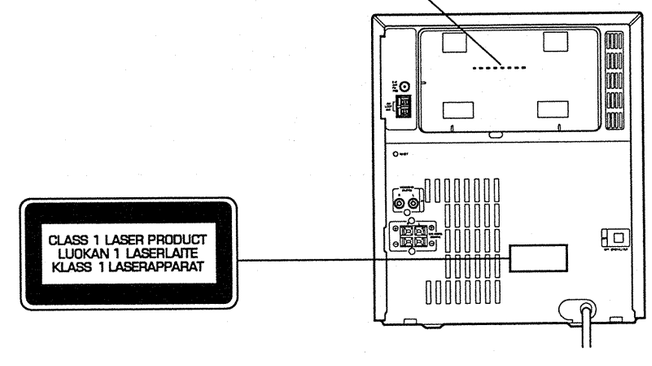
LASER BEAM SAFETY PRECAUTION

- Pick-up that emits a laser beam is used in this CD player section.

CAUTION :
USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE

LASER OUTPUT ..... 0.6 mW Max. (CW)
WAVELENGTH ..... 790 nm

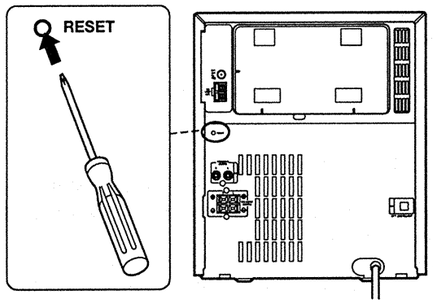
CAUTION – INVISIBLE LASER RADIATION WHEN OPEN AND INTERLOCKS DEFEATED. AVOID EXPOSURE TO BEAM.
ADVARSEL – USYNLIG LASER STRÅLING VED ÅBNING, NÅR SIKKERHEDSAFBRYDERE ER UDE AF FUNKTION, UNDGÅ UDS ÆTTELSE FOR STRÅLING.
VARNING – OSYNLIG LASER STRÅLNING NÄR DENNA DEL ÄR ÖPPNAD OCH SPÄRR ÄR URKOPPLAD. STRÅLEN ÄR FARLIG.
VORSICHT – UNSICHTBARE LASERSTRAHLUNG TRITT AUS, WENN DECKEL GEÖFFNET UND WENN SICHERHEITSVERRIEGELUNG ÜBERBRÜCKT IST. NICHT, DEM STRAHL AUSSETZEN.
VARO – AVATTAESSA JA SUOJALUKITUS OHITETTAESSA OLET ALTTIINA NÄKYMÄTTÖMÄLLE LASERSÄTEILYLLE. ÄLÄ KATSO SÄTEESEEN.



WHAT TO DO IF

- If the operation of the unit or display is not normal, or you wish to clear the contents of the memory.

1. Disconnect the power cord from AC outlet.
2. Press the **RESET** button for at least **30** seconds.
3. Connect the power cord.
4. Press the **POWER** button to turn the power on.



CD PICK-UP MAINTENANCE

About pick-up (Optical lens) Cleaning

Clean the lens with the specified cleaning disc or moisten a cotton swab with isopropyl alcohol and cleaning paper.

Specified cleaning disc : LC-1 (Part code : 645 026 1961 ..... manufactured by SANYO.)

Regarding procedure of cleaning with moisten cotton swab, please refer to the attached as follows.

1. Cotton swab wrapped with Cleaning paper.
2. Add the isopropyl alcohol.
3. Gently move the tip of cotton swab just like a draw a whirlpool from inside to outside on the surface of lens.

SERVICE MODE

1. Preparation

Press the unit's STOP and FM MODE buttons at the same time. (This initiates service mode entry status.)

Next, press another button on the unit to switch to the corresponding service mode.

The unit enters a service mode only if another button is pressed during that 1 second.

2. CD Repair

1. Within 1 second of activating service mode entry status, press the CD BACK button to enter this service mode.
2. When in the CD function mode the LCD segment displays a CD operation indication that is different from its normal indication. If a CD error occurs, a display appears as shown in below.
   Also, from the point at which the error occurred onward, the CD operation display is fixed. The fixed displays is canceled by pressing the STOP button when the CD is stopped.
3. Press the POWER button to cancel this mode.

Disc No.	State of CD Error
0	Good
1	Focusing is not possible in focus serch.
2	The subcode is not input during disc startup.
3	TOC can not be read.
4	Focus was lost while the servo was on. (during playing, etc.)
5	The subcode is not input while the servo in on. (during playing, etc.)

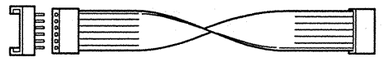
3. Checking the FL connection

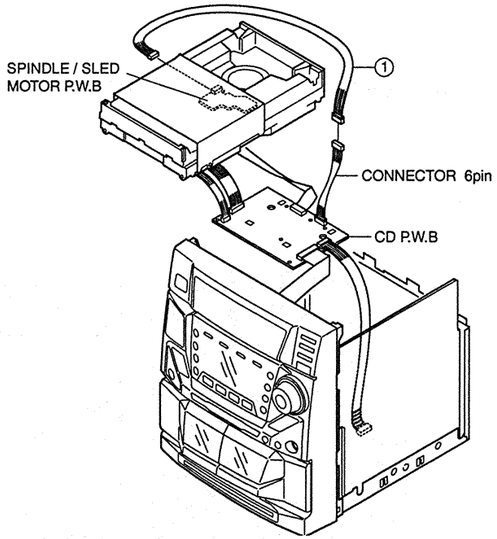
1. Within 1 second of activating service mode entry status, press the TUNING UP button to enter this service mode.
2. FL and LED turns on order when enter this mode.
3. When every indication turns on, become on and off light indication.
4. Press the POWER button to cancel this mode.

CD PLAYER ADJUSTMENTS

1. CABLE CONNECTION

① ASSY, CONNECTOR-S (614 303 5633)

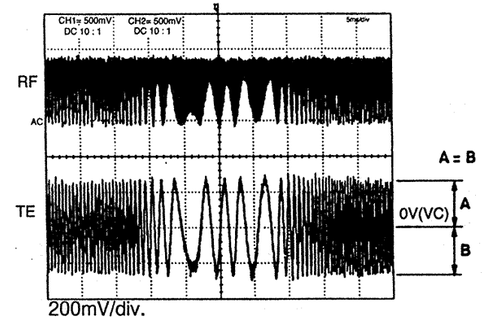




2. ADJUSTMENTS

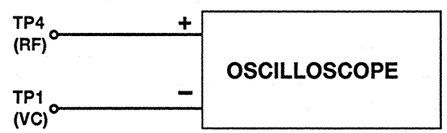
(1) Confirm the tracking balance

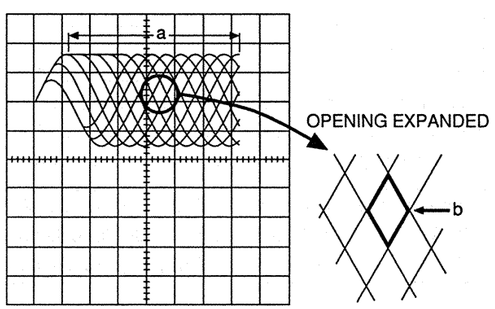
1. Connect an Oscilloscope to TP2 (TE) and TP1 (VC).
2. Turn on the POWER switch.
3. Set the test disc. (DISC 1)
4. Press "STOP" button and "FM MODE" button simultaneously. Within 1 second after pressing the "PLAY/PAUSE" button. (SERVICE MODE : Tracking balance adjustment mode)
5. Confirm that the oscilloscope waveform is symmetrical on the top and bottom in relation to 0V (VC).



(2) Checking the "eye" pattern

1. Switch "ON" the POWER.
2. Connect an oscilloscope to TP4 (RF) and TP1 (VC).
3. Load the test disc.
4. Press the PLAY button.
5. Check to be sure that the "eye" pattern is at the center of waveform and that the diamond shape is clearly defined.
6. Press the STOP button.
7. Turn off the POWER switch.



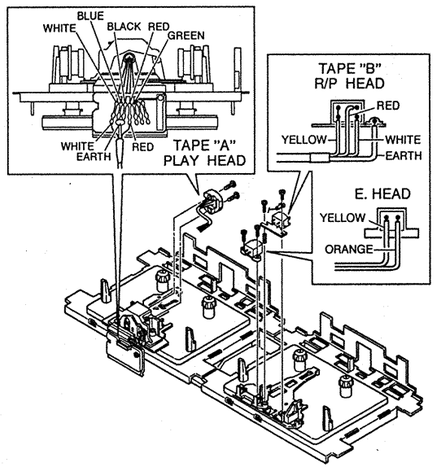


Adjustment Item	Test Tape	Measuring Instrument	Output connection	Adjust location	Adjust value
(a) HEAD AZIMUTH DECK "A"	VTT738 etc. (10KHz)	AC-voltmeter	SPEAKER TERMINAL	HEAD AZIMUTH SCREW	Max.
(b) HEAD AZIMUTH DECK "B"	VTT738 etc. (10KHz)	AC-voltmeter	SPEAKER TERMINAL	HEAD AZIMUTH SCREW	Max.
(c) MOTOR SPEED (NORMAL)	MTT-111 (3,000Hz)	FREQUENCY COUNTER	SPEAKER TERMINAL	VR311	3,000Hz

1. HEAD REPLACEMENT AND AZIMUTH ADJUSTMENT

(1) Head replacement

1. After replacement, demagnetize the heads by using a degausser.
2. Be sure to clean the heads before attempting to make any adjustments.
3. Be sure both channels (1 and 2) are the same level. (Using a dual-channels oscilloscope).
4. All wiring should be returned to the original position after work is completed.



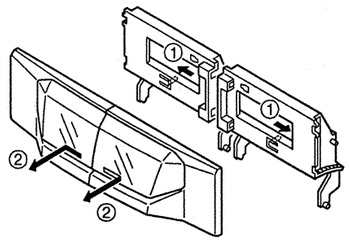
(2) Head azimuth

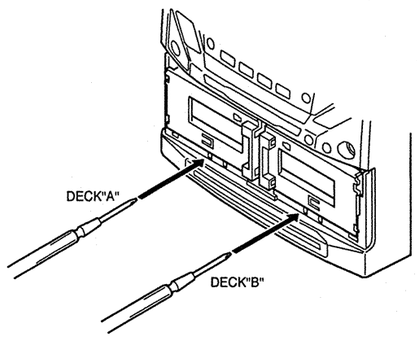
- DECK "A"

1. Remove the left side of CASSETTE LID.
2. Load a test tape (VTT-738,etc.: 10kHz) for azimuth adjustment.
3. Press the PLAY button.
4. Use a flat-tip (-) screwdriver to turn the screw for normal azimuth adjustment so that the left and right outputs are maximized at the same phase during normal playback.
5. Press the STOP button.

- DECK "B"

1. Remove the right side of CASSETTE LID.
2. Load a test for azimuth adjustment.
3. Press the PLAY button.
4. Azimuth screw adjustment.
5. Press the STOP button.

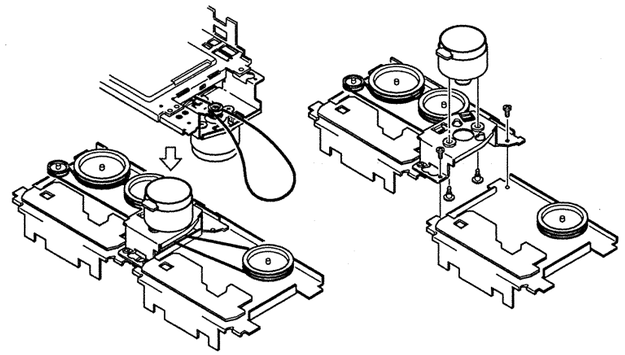




- After making the adjustment, secure the azimuth adjustment screw by applying screw lock (TB-1401B).

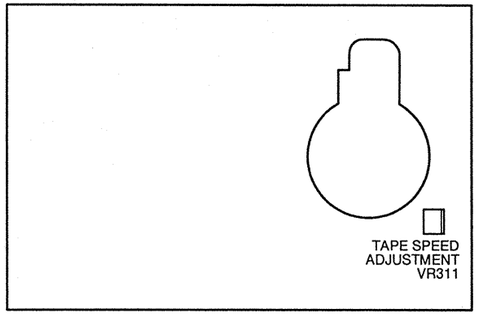
2. MOTOR REPLACEMENT AND SPEED ADJUSTMENT

(1) Motor replacement



(2) Motor speed

1. Insert the test tape (MTT-111 or etc. 3,000 Hz) into DECK A.
2. Press the PLAY button.
3. Adjust VR311 so that the frequency counter show a reading of 3,020 ± 10 Hz.
4. Press the STOP button.



3. CHECKING THE MECHANISM TORQUES

- Clean the head, capstan and pinch roller before making any measurement.

DECK " A & B"

Measureent	Take-up torque	Back tension	Tape tension
Cassette for measurement	PLAY : TW-2111A F.FWD/REW : TW-2231	PLAY : TW-2111A	Drive-power cassette TW-2412
PLAY	25 ~ 63 gr.cm	2.0 ~ 6.0 gr.cm	70 gr or more
F.FWD/REW	60 ~ 120 gr.cm	-	-

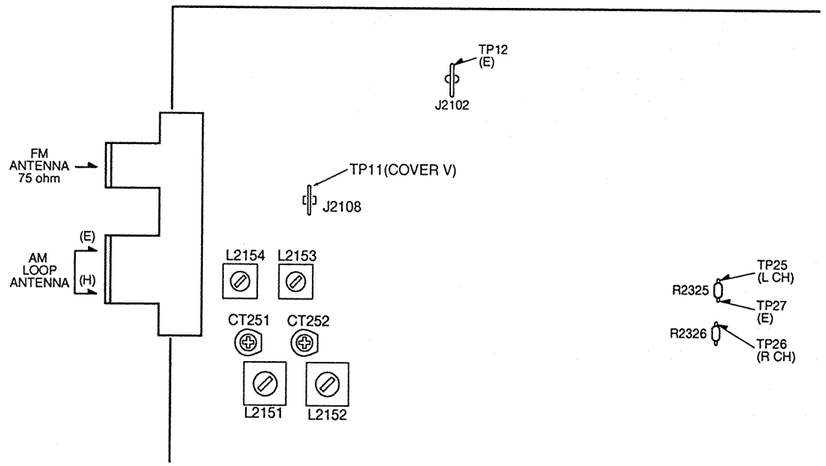
TUNER ADJUSTMENTS

- Use a plastic screw driver for adjustments.
- MODE : STEREO
- Speaker impedance : 6 ohm
- TUNING

  FM : 87.5 - 108.0 MHz (50 kHz step)

  MW : 522 - 1710 kHz (9 kHz step)

  LW : 144 - 288 kHz (9 kHz step)



SG RF Level : 75Ω open Voltage dBμV

Antenna : 75Ω unbalanced , Modulation : 1 kHz

Dev. : ±22.5kHz(MONO) ±22.5kHz(STEREO) ±6.75kHz(PILOT)

SG Modulation : 1kHz, 30%

Antenna, IRE Loop, Distance : 60 cm

1. FM

Step	Adjusting Circuit	Connection		SG Frequency	Set Position	Adjustment	Remark
		Input	Output				
1	Cover voltage	---	Connect Digital DC voltmeter to TP11(H), TP12(E).	87.5 MHZ	Low	---	more than 0.9 V
		---		108.0 MHZ	High	---	less than 9.0 V
2	Tracking	Connect FM SG to FM Antenna (SG=8dB μV)	Connect to VTVM TP25(L) or TP26(R), TP27(E)	90.0 MHZ	Low	---	Max.
				106.0 MHZ	High	---	

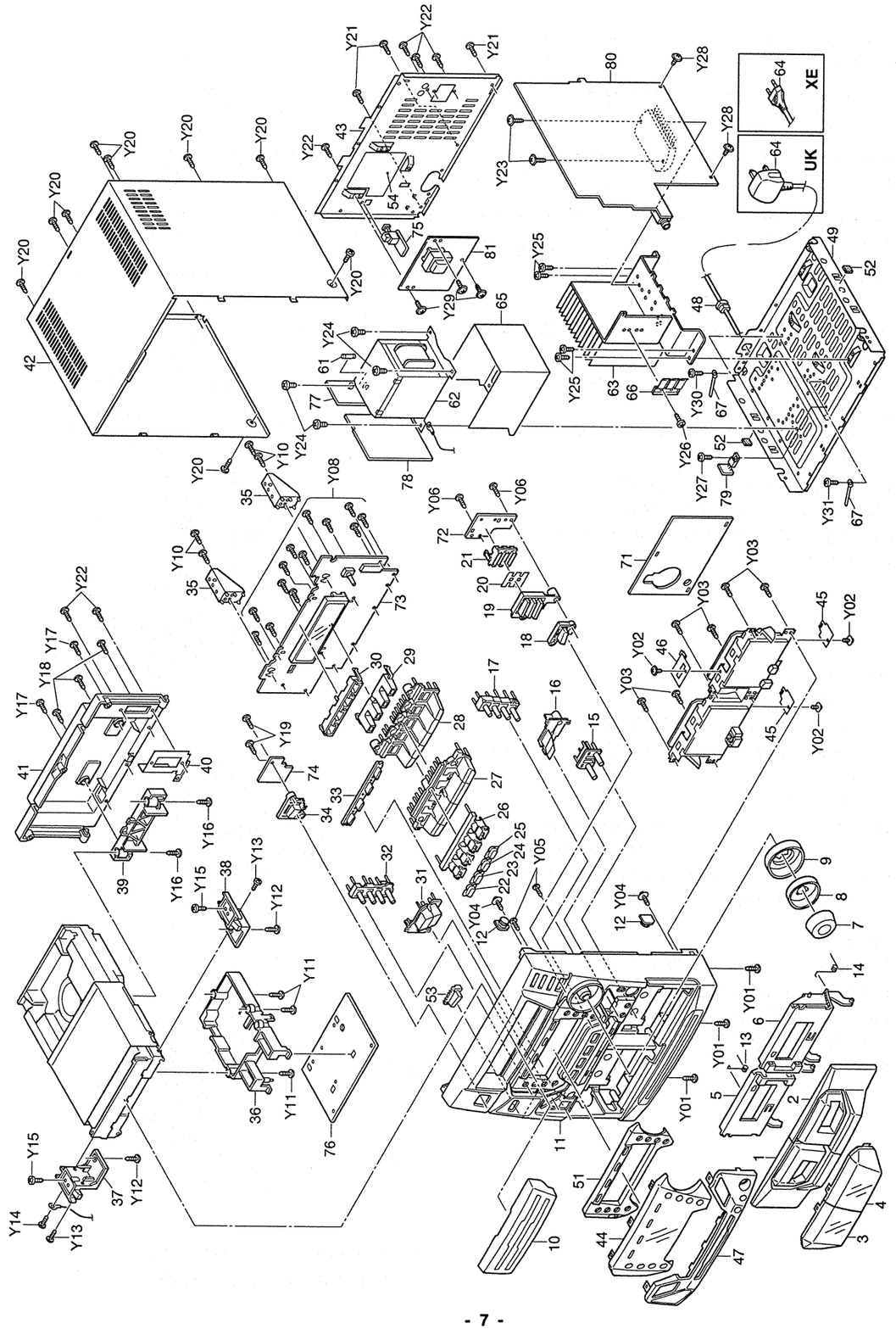
2. MW

Step	Adjusting Circuit	Connection		SG Frequency	Set Position	Adjustment	Remark
		Input	Output				
1	Cover voltage	---	Connect Digital DC voltmeter to TP11(H), TP12(E).	522 kHZ	Low	L2153	1.0 V ± 0.05 V
		---		1611 kHZ	High	---	less than 9.0 V
2	Tracking	Connect AM SG to Test loop Ant.(SG=80dB μV)	Connect to VTVM TP25(L) or TP26(R), TP27(E).	603 kHZ	Low	L2152	Max.
				1404 kHZ	High	CT252	

3. LW

Step	Adjusting Circuit	Connection		SG Frequency	Set Position	Adjustment	Remark
		Input	Output				
1	Cover voltage	---	Connect Digital DC voltmeter to TP11(H), TP12(E).	144 kHZ	Low	L2154	1.5 V ± 0.05 V
		---		288 kHZ	High	---	less than 9.0 V
2	Tracking	Connect AM SG to Test loop Ant.(SG=85dB μV)	Connect to VTVM TP25(L) or TP26(R), TP27(E).	162 kHZ	Low	L2151	Max.
				279 kHZ	High	CT251	

EXPLODED VIEW (CABINET & CHASSIS)



PARTS LIST

PRODUCT SAFETY NOTICE

EACH PRECAUTION IN THIS MANUAL SHOULD BE FOLLOWED DURING SERVICING. COMPONENTS IDENTIFIED WITH THE IEC SYMBOL ⚠ IN THE PARTS LIST AND THE SCHEMATIC DIAGRAM DESIGNATED COMPONENTS IN WHICH SAFETY CAN BE OF SPECIAL SIGNIFICANCE. WHEN REPLACING A COMPONENT IDENTIFIED BY ⚠, USE ONLY THE REPLACEMENT PARTS DESIGNATED, OR PARTS WITH THE SAME RATINGS OF RESISTANCE, WATTAGE OR VOLTAGE THAT ARE DESIGNATED IN THE PARTS LIST IN THIS MANUAL. LEAKAGE-CURRENT OR RESISTANCE MEASUREMENTS MUST BE MADE TO DETERMINE THAT EXPOSED PARTS ARE ACCEPTABLY INSULATED FROM THE SUPPLY CIRCUIT BEFORE RETURNING THE PRODUCT TO THE CUSTOMER.

CAUTION : Regular type resistors and capacitors are not listed. To know those values, refer to the schematic diagram.
Regular type resistors are less than 1/4 W carbon type and 0 ohm chip resistors.
Regular type capacitors are less than 50 V and less than 1000 µF type of Ceramic type and Electrical type.

PACKING & ACCESSORY

REF.NO.	PART NO.	DESCRIPTION
	614 303 6746	CARTON CASE (UK)
	614 303 6753	CARTON CASE (XE)
	614 303 9341	CUSHION,TOP
	614 303 9358	CUSHION,BOTTOM
	645 024 3745	POLY SHEET,1300X550,SET
	614 303 6937	INSTRUCTION MANUAL (UK)
	614 303 6876	INSTRUCTION MANUAL (XE)
	614 306 7252	INSTRUCTION MANUAL,GREEK (XE)
	645 005 1227	ASSY,ANTENA,LOOP
	614 229 4635	ANT
	645 032 6554	REMOCON,RB-C30AR (UK)
	645 034 1571	REMOCON,RB-C30ARD (XE)
	645 035 8098	BATTERY COVER,REMOTE CONTROL

CABINET & CHASSIS

REF.NO.	PART NO.	DESCRIPTION
1	614 304 0989	COVER,CASSETTE,LEFT
2	614 301 6373	COVER,CASSETTE,RIGHT
3	614 301 6403	DEC,WINDOW,LEFT
4	614 301 6410	DEC,WINDOW,RIGHT
5	614 265 7898	ASSY,LID,CASSETTE,DECK L
6	614 265 7904	ASSY,LID,CASSETTE,DECK R
7	614 301 6502	KNOB,ROTARY
8	614 301 6359	CAP,VOL
9	614 301 6496	DEC,WINDOW,VOL
10	614 301 6427	DEC,CD,TRAY
11	614 303 6364	ASSY,CABINET,FRONT
12	614 270 8316	ASSY,GEAR
13	614 302 1896	SPRING,WIRE,LID,CASSETTE,L
14	614 302 4422	SPRING,WIRE,LID,CASSETTE,R
15	614 301 6335	BUTTON,REC
16	614 301 6298	BUTTON,TUNING
17	614 301 6274	BUTTON,SOUND
18	614 301 6250	BUTTON,CD,OPEN
19	614 301 6243	BUTTON,DISC,SELECT
20	614 302 1810	DEC,SHEET,DISC,DISC,SELECT
21	614 301 6564	REFLECTOR,DISC,SELECT
22	614 302 7461	DEC,WINDOW,FUNC,CD
23	614 302 7478	DEC,WINDOW,FUNC,TAPE
24	614 302 7485	DEC,WINDOW,FUNC,TUNER
25	614 302 7492	DEC,WINDOW,FUNC,VIDEO
26	614 301 6281	BUTTON,FUNCTION
27	614 301 6311	BUTTON,CD
28	614 302 3456	BUTTON,TAPE
29	614 301 6571	REFLECTOR,FUNCTION
30	614 300 3274	REFLECTOR SOUND,SOUND
31	614 301 6304	BUTTON,PRESET
32	614 301 6267	BUTTON,CLOCK
33	614 301 6434	DEC,WINDOW,SOUND
34	614 301 6236	BUTTON,POWER
35	614 301 6533	MOUNTING,CD,FRONT/CD MECHA
36	614 300 3113	COVER PICK,CD PICK COVER
37	614 301 6526	MOUNTING,CD,RIGHT, FRONT/CD MECHA
38	614 301 6519	MOUNTING,CD,LEFT, FRONT/CD MECHA
39	614 302 1834	MOUNTING,CD,REAR, PANEL REAR/CD MECHA
40	614 302 1902	TERMINAL,ANT,PANEL REAR/ANT
41	614 302 1865	PANEL,REAR,CD MECHA
42	614 305 6843	ASSY,CABINET,AFTER BENDING
43	614 304 1276	PANEL,REAR (UK)
43	614 304 1283	PANEL,REAR (XE)
44	614 305 2418	DEC,WINDOW,FL (UK)
44	614 303 6425	DEC,WINDOW,FL (XE)
45	614 289 1117	MOUNTING,BRACKET, DECK MECHA BOTTOM[
46	614 289 1100	MOUNTING,BRACKET, DECK MECHA TOP
47	614 303 7897	PANEL,OPERATION
48	614 129 1901	FIXER,AC CORD
or	614 284 1884	FIXER,AC CORD
49	614 290 4954	ASSY,CABINET,BOTTOM
51	614 301 6380	COVER,FL,BASE
52	614 250 6721	FOOT,SIDE
53	614 301 6847	BUTTON,SURROUND
54	614 305 8656	SPACER,SHEET,SUB TRANS
	614 274 8190	LABEL,SAFETY,LASER

FIXING PARTS

REF.NO.	PART NO.	DESCRIPTION
Y01	411 021 3503	SCR S-TPG BIN 3X10,BOTTOM/FRONT
Y02	411 024 3708	SCR S-TPG PAN+FLG 2X6, DECK MECHA/MOUNTING PWB
Y03	411 021 3503	SCR S-TPG BIN 3X10,DECK MECHA
Y04	411 020 9902	SCR S-TPG BRZ+FLG 3X8, GEAR CASSETTE
Y05	411 165 3803	SCR S-TPG BIN 2.3X10, FRONT/PANEL OPERATION
Y06	411 021 3503	SCR S-TPG BIN 3X10,DISC PWB
Y08	411 021 3503	SCR S-TPG BIN 3X10,FRONT PWB
Y10	411 021 3503	SCR S-TPG BIN 3X10, MOUNTING CD FRONT
Y11	411 021 3503	SCR S-TPG BIN 3X10, CD MECHA/COVERPICK
Y12	411 021 3503	SCR S-TPG BIN 3X10, MOUNING FRONT/MOUNTING L,R
Y13	411 021 1806	SCR S-TPG BIN 2.6X10, CD MECHA/MOUNTING L,R
Y14	411 027 3101	SCR S-TPG BIN 3X8,CD PWB GRAND
Y15	411 021 3503	SCR S-TPG BIN 3X10, CD MECHA/MOUNTING L,R
Y16	411 021 3503	SCR S-TPG BIN 3X10, CD MECHA/MOUNTING REAR
Y17	411 021 3701	SCR S-TPG BIN 3X10, CD MECHA/REAR
Y18	411 021 3701	SCR S-TPG BIN 3X10, BOTTOM/PANEL REAR

REF.NO.	PART NO.	DESCRIPTION
Y19	411 021 3503	SCR S-TPG BIN 3X10,POWER PWB
Y20	411 021 3701	SCR S-TPG BIN 3X10,CABINET TOP
Y21	411 021 3701	SCR S-TPG BIN 3X10, BOTTOM/PANEL REAR
Y22	411 021 3701	SCR S-TPG BIN 3X10, REAR/ELECT PARTS
Y23	411 020 9506	SCR S-TPG BRZ+FLG 3X16, POWER AMP 1,2
Y24	411 001 3905	SCR S-TPG BIN 4X6,TRANS
Y25	411 021 3503	SCR S-TPG BIN 3X10, HEAT SINK/BOTTOM
Y26	411 021 3503	SCR S-TPG BIN 3X10,TR HOLDER
Y27	411 021 6405	SCR S-TPG BIN 3X8,POWER IC
Y28	411 020 9902	SCR S-TPG BRZ+FLG 3X8, AMP PWB/BOTTOM
Y29	411 021 3701	SCR S-TPG BIN 3X10, REAR/SUB PWB
Y30	411 001 3905	SCR S-TPG BIN 4X6,FOR LUG
Y31	411 021 5705	SCR S-TPG BIN 3X6,FOR LUG

ELECTRICAL PARTS

REF.NO.	PART NO.	DESCRIPTION
61	⚠ 423 016 7809	FUSE 250V 2A
62	⚠ 645 033 8540	POWER TRANSFORMER
63	⚠ 614 303 9471	ASSY,HEAT SINK
64	⚠ 645 008 9732	CORD,POWER-1.8MK (UK)
or	⚠ 645 033 7543	CORD,POWER-1.6MK (UK)
or	⚠ 645 036 9797	CORD,POWER-1.6MK (UK)
or	⚠ 645 036 9803	CORD,POWER-1.6MK (UK)
64	⚠ 645 016 9939	CORD,POWER-1.74MK (XE)
or	⚠ 614 255 2513	CORD,POWER (XE)
65	614 291 6629	SHIELD,PT SHIELD
66	614 291 6568	MOUNTING,PWB,TR HOLDER
67	⚠ 614 130 0382	LUG
	⚠ 614 086 2164	COVER,CAPACITOR
CN381	614 304 7896	ASSY,WIRE,DECK A
CN382	614 303 6388	ASSY,WIRE,DECK B
CN383	645 035 9460	FLEXIBLE FLAT CABLE,AMP-DECK
CN384	645 028 5509	FLEXIBLE FLAT CABLE,FRONT-DECK
CN681	645 033 7413	FLEXIBLE FLAT CABLE,CD
CN682	614 302 2107	ASSY,WIRE,CD
CN683	614 306 6545	ASSY,WIRE,CD-DIGITAL OUT
CN691	645 012 7687	FLEXIBLE FLAT CABLE,FRONT-CD

DECK P.W.BOARD ASSY

REF.NO.	PART NO.	DESCRIPTION
71	614 300 6053	ASSY,PWB,DECK (Only Initial)
C3606	403 061 7306	POLYESTER 4700P J 50V
C3607	403 061 9607	POLYESTER 0.047U J 50V
CN301	645 012 5089	SOCKET,FPC 10P
or	645 005 4181	SOCKET,10P
CN302	645 012 5096	SOCKET,FPC 12P
or	645 005 4204	SOCKET,12P
CN311	614 035 4959	SOCKET,DIP 6P
or	645 012 7823	SOCKET,DIP 6P
CN312	614 020 6562	SOCKET,4P
or	614 223 9223	SOCKET
CN313	645 012 2729	SOCKET,DIP 7P
or	645 012 7830	SOCKET,DIP 7P
CN321	614 303 6647	CORD,6P CONNECTOR,A_MECHA
CN323	614 303 6654	CORD,7P CONNECTOR,B_MECHA
CN371	645 005 7373	PLUG,3P
or	645 007 0068	PLUG,3P
CN372	645 005 8127	PLUG,6P
or	645 007 0099	PLUG,6P
CN373	645 005 8226	PLUG,3P
or	645 009 6433	PLUG,3P
CN374	614 305 6317	CORD,1P CONNECTOR
D3101	⚠ 407 148 6701	DIODE 1A3-I
D3102	⚠ 407 148 6701	DIODE 1A3-I
D3601	407 099 5105	ZENER DIODE MTZJ4.7B
D3621	407 012 4406	DIODE 1SS133
D3622	407 012 4406	DIODE 1SS133
D3623	407 012 4406	DIODE 1SS133
D3624	407 012 4406	DIODE 1SS133
HS301	614 215 9347	HEAT SINK
HS302	614 215 9347	HEAT SINK
IC361	409 346 2301	IC BU2090F
IC362	409 050 8200	IC TC4011BF
IC363	409 189 3404	IC BA7755A
IC371	409 251 1000	IC TA8189N
L3601	645 032 5823	TRANS,OSC,85KHZ
L3701	645 004 0580	INDUCTOR,1M J
L3801	645 004 0580	INDUCTOR,1M J
Q3122	405 141 3703	TR KTA1271-Y
or	405 008 2405	TR 2SB698-F
or	405 008 2504	TR 2SB698-G
or	405 006 3909	TR 2SA952-K
or	405 006 4005	TR 2SA952-L
Q3124	405 141 3703	TR KTA1271-Y
or	405 008 2405	TR 2SB698-F
or	405 008 2504	TR 2SB698-G
or	405 006 3909	TR 2SA952-K
or	405 006 4005	TR 2SA952-L
Q3125	405 141 3703	TR KTA1271-Y
or	405 008 2405	TR 2SB698-F
or	405 008 2504	TR 2SB698-G
or	405 006 3909	TR 2SA952-K
or	405 006 4005	TR 2SA952-L
Q3601	405 141 3703	TR KTA1271-Y
or	405 008 2405	TR 2SB698-F
or	405 008 2504	TR 2SB698-G
or	405 006 3909	TR 2SA952-K
or	405 006 4005	TR 2SA952-L
Q3602	405 143 8706	TR KTC3199-GR
or	405 011 8609	TR 2SC1740S-S
or	405 011 8500	TR 2SC1740S-R
or	405 017 9600	TR 2SC3330-T
or	405 017 9709	TR 2SC3330-U
Q3603	405 141 3307	TR KTC3198-GR
or	405 141 3208	TR KTC3198-Y
or	405 019 3804	TR 2SC536-G-NP
or	405 019 2708	TR 2SC536-F-NP
Q3605	405 151 4905	TR KTC3200-GR
or	405 151 5001	TR KTC3200-BL
or	405 011 1907	TR 2SC1627-Y
or	405 012 8103	TR 2SC2003-L
or	405 137 6404	TR 2SC2003-K
Q3611	405 109 9204	TR KRC102M-A
or	405 000 3103	TR DTC114ES
or	405 078 3005	TR BA1L4M
Q3621	405 109 9402	TR KRC111M
or	405 000 3400	TR DTC114TS
Q3622	405 109 9204	TR KRC102M-A
or	405 000 3103	TR DTC114ES
or	405 078 3005	TR BA1L4M
Q3701	405 109 9402	TR KRC111M
or	405 000 3400	TR DTC114TS
Q3702	405 095 2708	TR 2SJ40-D
or	405 095 2807	TR 2SJ40-E
or	405 149 6003	TR 2SJ498
or	405 085 9106	TR 2SJ105-GR
or	405 095 3408	TR 2SJ105-BL

PARTS LIST

REF.NO.	PART NO.	DESCRIPTION
Q3703	405 095 2708	TR 2SJ40-D
or	405 095 2807	TR 2SJ40-E
or	405 149 6003	TR 2SJ498
or	405 085 9106	TR 2SJ105-GR
or	405 095 3408	TR 2SJ105-BL
Q3704	405 109 9204	TR KRC102M-A
or	405 000 3103	TR DTC114ES
or	405 078 3005	TR BA1L4M
Q3801	405 109 9402	TR KRC111M
or	405 000 3400	TR DTC114TS
Q3802	405 095 2708	TR 2SJ40-D
or	405 095 2807	TR 2SJ40-E
or	405 149 6003	TR 2SJ498
or	405 085 9106	TR 2SJ105-GR
or	405 095 3408	TR 2SJ105-BL
Q3803	405 095 2708	TR 2SJ40-D
or	405 095 2807	TR 2SJ40-E
or	405 149 6003	TR 2SJ498
or	405 085 9106	TR 2SJ105-GR
or	405 095 3408	TR 2SJ105-BL
Q3804	405 109 9204	TR KRC102M-A
or	405 000 3103	TR DTC114ES
or	405 078 3005	TR BA1L4M
R3608	401 011 4900	CARBON 82 JA 1/2W
VR311	645 003 5685	VR,SEMI,2.2K N

DISC SWITCH P.W.BOARD ASSY

REF.NO.	PART NO.	DESCRIPTION
72	614 301 5505	ASSY,PWB,DISC SW,(Only Initial)
CN661	614 035 4959	SOCKET,DIP 6P
or	645 012 7823	SOCKET,DIP 6P
D6621	408 037 4204	LED SLP-3118B-51HAB-T1,DISC_LED
D6622	408 037 4204	LED SLP-3118B-51HAB-T1,DISC_LED
D6623	408 037 4204	LED SLP-3118B-51HAB-T1,DISC_LED
D6624	408 037 4204	LED SLP-3118B-51HAB-T1,DISC_LED
D6625	408 037 4204	LED SLP-3118B-51HAB-T1,DISC_LED
D6626	408 037 4204	LED SLP-3118B-51HAB-T1,DISC_LED
R6609	401 038 2101	MT-GLAZE 2.7K JA 1/10W
R6610	401 038 6406	MT-GLAZE 4.7K JA 1/10W
R6611	401 039 0403	MT-GLAZE 8.2K JA 1/10W
R6624	401 038 7502	MT-GLAZE 56 JA 1/10W
R6625	401 038 7502	MT-GLAZE 56 JA 1/10W
R6626	401 038 7502	MT-GLAZE 56 JA 1/10W
S6608	614 240 1002	SWITCH,TACT
or	645 006 5958	SWITCH,PUSH 1P-1T
or	614 220 5471	SWITCH,TACT
S6609	614 240 1002	SWITCH,TACT
or	645 006 5958	SWITCH,PUSH 1P-1T
or	614 220 5471	SWITCH,TACT
S6610	614 240 1002	SWITCH,TACT
or	645 006 5958	SWITCH,PUSH 1P-1T
or	614 220 5471	SWITCH,TACT

FRONT P.W.BOARD ASSY

REF.NO.	PART NO.	DESCRIPTION
73	614 302 4125	ASSY,PWB,FRONT (UK) (Only Initial)
73	614 303 5008	ASSY,PWB,FRONT (XE) (Only Initial)
BR601	614 302 1407	HOLDER,FL,FL_MOUNT
C6095	403 291 5608	ELECT 1000U M 6.3V
CN601	645 032 5809	PLUG,22P,FRONT-PRE
CN602	614 035 4935	SOCKET,DIP 4P
or	645 012 7809	SOCKET,DIP 4P
CN603	645 012 5249	SOCKET,FPC 20P
or	645 005 4280	SOCKET,20P
CN604	645 012 5096	SOCKET,FPC 12P
or	645 005 4204	SOCKET,12P

REF.NO.	PART NO.	DESCRIPTION
CN608	614 035 4959	SOCKET,DIP 6P
or	645 012 7823	SOCKET,DIP 6P
CN612	614 303 6623	CORD,4P CONNECTOR,FRONT-PT2
D6001	407 012 4406	DIODE 1SS133
D6004	407 012 4406	DIODE 1SS133
D6007	407 099 4603	ZENER DIODE MTZJ3.9B
D6201	408 034 8700	LED SLZ-981C-13H-AB-T2,FUNC
D6202	408 034 8700	LED SLZ-981C-13H-AB-T2,FUNC
D6203	408 034 8700	LED SLZ-981C-13H-AB-T2,FUNC
D6204	408 034 8700	LED SLZ-981C-13H-AB-T2,FUNC
D6205	408 040 6806	LED SLZ-981C-06H-AB-T2, SOUND_PRESET
D6206	408 040 6806	LED SLZ-981C-06H-AB-T2, SOUND_PRESET
D6207	408 040 6806	LED SLZ-981C-06H-AB-T2, SOUND_PRESET
D6208	408 040 6806	LED SLZ-981C-06H-AB-T2, SOUND_PRESET
D6231	408 038 4104	LED SLP-3130C-81H-AB-T1,ENCODER
D6232	408 038 4104	LED SLP-3130C-81H-AB-T1,ENCODER
D6233	408 038 4104	LED SLP-3130C-81H-AB-T1,ENCODER
D6234	408 038 4104	LED SLP-3130C-81H-AB-T1,ENCODER
D6235	408 038 4104	LED SLP-3130C-81H-AB-T1,ENCODER
D6236	408 038 4104	LED SLP-3130C-81H-AB-T1,ENCODER
D6237	408 038 4104	LED SLP-3130C-81H-AB-T1,ENCODER
D6238	408 038 4104	LED SLP-3130C-81H-AB-T1,ENCODER
DS601	407 203 9203	PHOTO DIODE SPS-442-1-E,IR
FL601	645 033 3194	FLOURESCENT TUBE,FL
IC601	410 343 9804	IC LC866548A-5L39 (UK)
IC601	410 347 0500	IC LC866556B-5L85 (XE)
IC602	409 426 1903	IC KIA4558F
or	409 039 7804	IC NJM4558M
IC604	409 346 2301	IC BU2090F
IC605	409 346 2301	IC BU2090F
L6000	645 001 4550	INDUCTOR,10U K
or	645 031 7835	INDUCTOR,10U K
Q6001	405 143 8706	TR KTC3199-GR
or	405 011 8500	TR 2SC1740S-R
or	405 011 8609	TR 2SC1740S-S
or	405 017 9600	TR 2SC3330-T
or	405 017 9709	TR 2SC3330-U
Q6002	405 002 0308	TR 2SA1037K-R
or	405 005 5508	TR 2SA812-M6
Q6003	405 141 3703	TR KTA1271-Y
or	405 008 2405	TR 2SB698-F
or	405 008 2504	TR 2SB698-G
Q6005	405 143 8706	TR KTC3199-GR
or	405 011 8500	TR 2SC1740S-R
or	405 011 8609	TR 2SC1740S-S
or	405 017 9600	TR 2SC3330-T
or	405 017 9709	TR 2SC3330-U
Q6201	405 146 5306	TR KRA102S
Q6202	405 146 5306	TR KRA102S
Q6203	405 146 5306	TR KRA102S
Q6204	405 146 5306	TR KRA102S
Q6205	405 146 5306	TR KRA102S
Q6206	405 146 5306	TR KRA102S
Q6207	405 146 5306	TR KRA102S
Q6208	405 146 5306	TR KRA102S
Q6211	405 146 5306	TR KRA102S
Q6212	405 146 5306	TR KRA102S
Q6213	405 146 5306	TR KRA102S
Q6214	405 146 5306	TR KRA102S
Q6215	405 146 5306	TR KRA102S
Q6216	405 146 5306	TR KRA102S
Q6217	405 146 5306	TR KRA102S
Q6218	405 146 5306	TR KRA102S
R6044	⚠ 401 038 6208	MT-GLAZE 47 JA 1/10W

PARTS LIST

REF.NO.	PART NO.	DESCRIPTION
R6856	⚠ 401 036 9607	MT-GLAZE 56 JA 1/8W
S6001	645 033 3460	SWITCH,ROTARY(ENCODER),VOL
S6100	614 240 1002	SWITCH,TACT
or	645 006 5958	SWITCH,PUSH 1P-1T
or	614 220 5471	SWITCH,TACT
S6101	614 240 1002	SWITCH,TACT
or	645 006 5958	SWITCH,PUSH 1P-1T
or	614 220 5471	SWITCH,TACT
S6102	614 240 1002	SWITCH,TACT
or	645 006 5958	SWITCH,PUSH 1P-1T
or	614 220 5471	SWITCH,TACT
S6103	614 240 1002	SWITCH,TACT
or	645 006 5958	SWITCH,PUSH 1P-1T
or	614 220 5471	SWITCH,TACT
S6104	614 240 1002	SWITCH,TACT
or	645 006 5958	SWITCH,PUSH 1P-1T
or	614 220 5471	SWITCH,TACT
S6105	614 240 1002	SWITCH,TACT
or	645 006 5958	SWITCH,PUSH 1P-1T
or	614 220 5471	SWITCH,TACT
S6106	614 240 1002	SWITCH,TACT
or	645 006 5958	SWITCH,PUSH 1P-1T
or	614 220 5471	SWITCH,TACT
S6107	614 240 1002	SWITCH,TACT
or	645 006 5958	SWITCH,PUSH 1P-1T
or	614 220 5471	SWITCH,TACT
S6115	614 240 1002	SWITCH,TACT
or	645 006 5958	SWITCH,PUSH 1P-1T
or	614 220 5471	SWITCH,TACT
S6116	614 240 1002	SWITCH,TACT
or	645 006 5958	SWITCH,PUSH 1P-1T
or	614 220 5471	SWITCH,TACT
S6117	614 240 1002	SWITCH,TACT
or	645 006 5958	SWITCH,PUSH 1P-1T
or	614 220 5471	SWITCH,TACT
S6118	614 240 1002	SWITCH,TACT
or	645 006 5958	SWITCH,PUSH 1P-1T
or	614 220 5471	SWITCH,TACT
S6119	614 240 1002	SWITCH,TACT
or	645 006 5958	SWITCH,PUSH 1P-1T
or	614 220 5471	SWITCH,TACT
S6120	614 240 1002	SWITCH,TACT
or	645 006 5958	SWITCH,PUSH 1P-1T
or	614 220 5471	SWITCH,TACT
S6121	614 240 1002	SWITCH,TACT
or	645 006 5958	SWITCH,PUSH 1P-1T
or	614 220 5471	SWITCH,TACT
S6122	614 240 1002	SWITCH,TACT
or	645 006 5958	SWITCH,PUSH 1P-1T
or	614 220 5471	SWITCH,TACT
S6123	614 240 1002	SWITCH,TACT
or	645 006 5958	SWITCH,PUSH 1P-1T
or	614 220 5471	SWITCH,TACT
S6124	614 240 1002	SWITCH,TACT
or	645 006 5958	SWITCH,PUSH 1P-1T
or	614 220 5471	SWITCH,TACT
S6125	614 240 1002	SWITCH,TACT
or	645 006 5958	SWITCH,PUSH 1P-1T
or	614 220 5471	SWITCH,TACT
S6126	614 240 1002	SWITCH,TACT
or	645 006 5958	SWITCH,PUSH 1P-1T
or	614 220 5471	SWITCH,TACT
S6130	614 240 1002	SWITCH,TACT
or	645 006 5958	SWITCH,PUSH 1P-1T
or	614 220 5471	SWITCH,TACT
S6131	614 240 1002	SWITCH,TACT
or	645 006 5958	SWITCH,PUSH 1P-1T
or	614 220 5471	SWITCH,TACT

REF.NO.	PART NO.	DESCRIPTION
S6132	614 240 1002	SWITCH,TACT
or	645 006 5958	SWITCH,PUSH 1P-1T
or	614 220 5471	SWITCH,TACT
S6133	614 240 1002	SWITCH,TACT
or	645 006 5958	SWITCH,PUSH 1P-1T
or	614 220 5471	SWITCH,TACT
S6134	614 240 1002	SWITCH,TACT
or	645 006 5958	SWITCH,PUSH 1P-1T
or	614 220 5471	SWITCH,TACT
S6135	614 240 1002	SWITCH,TACT
or	645 006 5958	SWITCH,PUSH 1P-1T
or	614 220 5471	SWITCH,TACT
S6136	614 240 1002	SWITCH,TACT
or	645 006 5958	SWITCH,PUSH 1P-1T
or	614 220 5471	SWITCH,TACT
S6137	614 240 1002	SWITCH,TACT
or	645 006 5958	SWITCH,PUSH 1P-1T
or	614 220 5471	SWITCH,TACT
S6139	614 240 1002	SWITCH,TACT
or	645 006 5958	SWITCH,PUSH 1P-1T
or	614 220 5471	SWITCH,TACT
X6001	614 252 7627	RESONATOR,XTAL,XTAL
X6002	645 018 6103	OSC,CERAMIC,6MHZ

POWER SWITCH P.W.BOARD ASSY

REF.NO.	PART NO.	DESCRIPTION
74	614 301 5512	ASSY,PWB,POWER SW (Only Initial)
S6740	614 240 1002	SWITCH,TACT
or	645 006 5958	SWITCH,PUSH 1P-1T
or	614 220 5471	SWITCH,TACT

DIGITAL OUT P.W.BOARD ASSY

REF.NO.	PART NO.	DESCRIPTION
75	614 303 5640	ASSY,PWB,DIGITAL OUT(Only Initial)
CN168	645 005 7373	PLUG,3P
or	645 007 0068	PLUG,3P
CN169	614 240 5703	OPTO CONNECTOR

CD P.W.BPARD ASSY

REF.NO.	PART NO.	DESCRIPTION
76	614 303 5992	ASSY,PWB,CD (Only Initial)
CN101	645 005 8110	PLUG,4P,TP1-4
CN111	645 033 5525	SOCKET,FFC 16P,CD_PICKUP
CN113	645 005 8127	PLUG,6P,BASEMECHA
CN114	614 020 6562	SOCKET,4P
or	614 223 9223	SOCKET
CN115	614 020 6609	SOCKET,8P
or	614 223 9261	SOCKET
CN122	645 012 5539	SOCKET,FPC 20P
CN123	645 006 0946	PLUG,7P
CN124	614 302 2084	ASSY,WIRE,CD-CDMECHA_4P
CN125	614 302 2091	ASSY,WIRE,CD-CDMECHA_8P
CN131	645 005 7373	PLUG,3P
D1211	407 063 9108	ZENER DIODE MTZJ6.8B
D1221	407 099 5303	ZENER DIODE MTZJ5.6B
D1480	407 012 4406	DIODE 1SS133
or	407 012 5809	DIODE 1SS176
D1601	⚠ 407 148 6701	DIODE 1A3-I
D1602	⚠ 407 148 6701	DIODE 1A3-I
D1603	⚠ 407 148 6701	DIODE 1A3-I
D1604	⚠ 407 148 6701	DIODE 1A3-I
D1981	407 099 5204	ZENER DIODE MTZJ5.1B
IC101	409 378 8104	IC LA9240ML
IC102	409 435 2106	IC LC78622NE,CD_DSP

PARTS LIST

REF.NO.	PART NO.	DESCRIPTION
IC103	⚠ 409 372 9602	IC LA6541
IC131	⚠ 409 441 4507	IC TA7291S(M)
IC132	⚠ 409 441 4507	IC TA7291S(M)
L1451	645 031 7835	INDUCTOR,10U K
LG101	614 129 9082	LUG,CD-MECHA
PR101	⚠ 645 014 2482	PROTECTOR,0.315A 125V
Q1301	405 008 7202	TR 2SB810-E
or	405 008 7301	TR 2SB810-F
or	405 008 6809	TR 2SB808-F-SPA
Q1401	⚠ 405 141 3604	TR KTA1273-Y
or	⚠ 405 009 5207	TR 2SB927-S
or	⚠ 405 001 9302	TR 2SA1020-Y
R1211	⚠ 402 072 0207	RESISTOR 5.6 J- 2W
or	⚠ 402 082 0709	RESISTOR 5.6 J- 2W
R1221	⚠ 402 072 0207	RESISTOR 5.6 J- 2W
or	⚠ 402 082 0709	RESISTOR 5.6 J- 2W
T1001	⚠ 407 212 0505	THERMISTOR RXE065
X1451	645 020 9024	OSC,CRYSTAL 16.9344MHZ

POWER TRANSFORMER, PRIMARY P.W.BOARD ASSY

REF.NO.	PART NO.	DESCRIPTION
77	614 302 6785	ASSY,PWB,PT1 (Only Initial)
CN498	645 031 7903	HOLDER,FUSE
or	645 006 4760	HOLDER,FUSE
CN499	645 031 7903	HOLDER,FUSE
or	645 006 4760	HOLDER,FUSE
WR498	614 017 8203	TERMINAL BOARD
WR499	614 017 8203	TERMINAL BOARD

POWER TRANSFORMER,SECONDARY P.W.BOARD ASSY

REF.NO.	PART NO.	DESCRIPTION
78	614 302 5504	ASSY,PWB,PT2 (Only Initial)
C4936	403 329 6201	ELECT 2200U M 35V
C4937	403 329 6201	ELECT 2200U M 35V
C4938	403 062 6506	POLYESTER 0.056U J 50V
CN493	645 006 0915	PLUG,4P
or	645 009 6440	PLUG,4P
CN495	645 023 4378	SOCKET,7P
CN497	614 035 4928	SOCKET,DIP 3P
or	614 237 9769	SOCKET
D4930	⚠ 407 196 5800	DIODE 1N5402BD82
D4931	⚠ 407 196 5800	DIODE 1N5402BD82
D4932	⚠ 407 196 5800	DIODE 1N5402BD82
D4933	⚠ 407 196 5800	DIODE 1N5402BD82
D4934	⚠ 407 148 6701	DIODE 1A3-I
D4935	407 148 6701	DIODE 1A3-I
D4950	407 012 4406	DIODE 1SS133
D4951	407 012 4406	DIODE 1SS133
D4952	407 099 9509	ZENER DIODE MTZJ30B
D4953	407 099 6003	ZENER DIODE MTZJ9.1B
LUG49	614 051 9808	LUG
PR493	⚠ 645 025 5137	PROTECTOR,7A 125V
PR495	⚠ 645 025 5137	PROTECTOR,7A 125V
Q4950	405 141 3406	TR KTA1266-GR
or	405 141 3505	TR KTA1266-Y
or	405 005 2002	TR 2SA733-P
or	405 005 1906	TR 2SA733-K
or	405 004 4502	TR 2SA608-F-NP
or	405 004 5004	TR 2SA608-G-NP
R4954	⚠ 402 081 0106	FUSIBLE RES 2.2 JA 1/4W
R4955	⚠ 402 081 1004	FUSIBLE RES 10 JA 1/4W
R4970	⚠ 402 082 2802	RESISTOR 10 J- 1W
R4971	⚠ 402 081 0809	RESISTOR 680 J- 1W

REGULATOR P.W.BOARD ASSY

REF.NO.	PART NO.	DESCRIPTION
79	614 305 2388	ASSY,PWB,REGULATOR (Only Initial)
CN425	614 035 4928	SOCKET,DIP 3P
or	614 237 9769	SOCKET
IC425	⚠ 409 396 8704	IC KIA7805PI
or	⚠ 409 145 2809	IC NJM7805FA

AMPRIFER & TUNER P.W.BOARD ASSY

REF.NO.	PART NO.	DESCRIPTION
80	614 302 5498	ASSY,PWB,AMP-TU (UK)(Only Initial)
80	614 305 9028	ASSY,PWB,AMP-TU (XE)(Only Initial)
C2152	403 082 0201	POLYPRO 470P J 100V
C2155	403 082 2205	POLYPRO 560P J 100V
C2457	403 106 1603	NP-ELECT 1U Q 50V
C4137	403 184 9904	MT-POLYEST 0.27U J 50V
C4147	403 184 9904	MT-POLYEST 0.27U J 50V
C4440	403 262 8607	DL-ELECT 0.047F Z 5.5V
or	403 304 4802	DL-ELECT 0.047F Z 5.5V
C4446	403 291 5608	ELECT 1000U M 6.3V
C4447	403 291 5707	ELECT 2200U M 6.3V
C4705	403 057 2407	POLYESTER 0.1U J 50V
C4706	403 057 2407	POLYESTER 0.1U J 50V
C4750	403 185 0108	MT-POLYEST 0.47U J 50V
C4751	403 184 9805	MT-POLYEST 0.22U J 50V
C4805	403 057 2407	POLYESTER 0.1U J 50V
C4806	403 057 2407	POLYESTER 0.1U J 50V
C4850	403 185 0108	MT-POLYEST 0.47U J 50V
C4851	403 184 9805	MT-POLYEST 0.22U J 50V
C4902	404 079 4301	ELECT 2200U M 63V
C4903	404 079 4301	ELECT 2200U M 63V
CN201	614 255 5750	TERMINAL
or	645 032 6394	TERMINAL
CN412	645 012 2729	SOCKET,DIP 7P
or	614 249 6770	SOCKET
CN422	645 009 0042	JACK,PHONE D6.43
CN452	614 249 8613	SOCKET,VIDEO
CN454	645 012 5089	SOCKET,FPC 10P
or	645 005 4181	SOCKET,10P
CN455	645 032 5816	SOCKET,22P
CN460	614 302 6396	CORD,7P CONNECTOR
CN470	645 033 3071	TERMINAL,SPEAKER
CN489	614 303 9662	CORD,4P CONNECTOR,SUB
CN491	614 035 4935	SOCKET,DIP 4P
or	614 237 9776	SOCKET
CN492	645 023 4378	SOCKET,7P
CT251	645 032 5670	TRIMMER,27PF
CT252	645 032 5663	TRIMMER,7PF
D2151	407 091 5004	VARACTOR DI SVC321SPA-C-2
D2152	407 091 5004	VARACTOR DI SVC321SPA-C-2
D2451	407 012 4406	DIODE 1SS133
or	407 012 5809	DIODE 1SS176
or	407 153 6109	DIODE 1SS119-041
or	407 007 9904	DIODE GMA01
D2452	407 153 7502	ZENER DIODE GZS3.0B
D2454	407 012 4406	DIODE 1SS133
or	407 012 5809	DIODE 1SS176
or	407 153 6109	DIODE 1SS119-041
or	407 007 9904	DIODE GMA01
D2455	407 012 4406	DIODE 1SS133
or	407 012 5809	DIODE 1SS176
or	407 153 6109	DIODE 1SS119-041
or	407 007 9904	DIODE GMA01
D2456	407 012 4406	DIODE 1SS133
or	407 012 5809	DIODE 1SS176
or	407 153 6109	DIODE 1SS119-041
or	407 007 9904	DIODE GMA01
D2461	407 012 4406	DIODE 1SS133
or	407 012 5809	DIODE 1SS176

PARTS LIST

REF.NO.	PART NO.	DESCRIPTION
or	407 153 6109	DIODE 1SS119-041
or	407 007 9904	DIODE GMA01
D2464	407 012 4406	DIODE 1SS133
or	407 012 5809	DIODE 1SS176
or	407 153 6109	DIODE 1SS119-041
or	407 007 9904	DIODE GMA01
D2466	407 012 4406	DIODE 1SS133 (XE)
or	407 012 5809	DIODE 1SS176 (XE)
or	407 153 6109	DIODE 1SS119-041 (XE)
or	407 007 9904	DIODE GMA01(XE)
D2467	407 012 4406	DIODE 1SS133 (XE)
or	407 012 5809	DIODE 1SS176 (XE)
or	407 153 6109	DIODE 1SS119-041 (XE)
or	407 007 9904	DIODE GMA01(XE)
D4110	407 012 4406	DIODE 1SS133
D4111	407 012 4406	DIODE 1SS133
D4112	407 012 4406	DIODE 1SS133
D4114	407 012 4406	DIODE 1SS133
D4150	407 099 5303	ZENER DIODE MTZJ5.6B
D4410	407 012 4406	DIODE 1SS133
D4414	407 012 4406	DIODE 1SS133
D4416	⚠ 407 148 6701	DIODE 1A3-I
D4501	407 099 6102	ZENER DIODE MTZJ10B
D4700	407 063 9108	ZENER DIODE MTZJ6.8B
D4701	407 063 9108	ZENER DIODE MTZJ6.8B
D4900	⚠ 407 196 5800	DIODE 1N5402BD82
D4901	⚠ 407 196 5800	DIODE 1N5402BD82
D4902	⚠ 407 196 5800	DIODE 1N5402BD82
D4903	⚠ 407 196 5800	DIODE 1N5402BD82
D4920	407 099 6805	ZENER DIODE MTZJ13B
D4921	407 099 4603	ZENER DIODE MTZJ3.9B
D4940	407 099 6805	ZENER DIODE MTZJ13B
D4960	407 099 6805	ZENER DIODE MTZJ13B
IC231	409 379 2705	IC LA1832ML
IC245	409 439 4502	IC LC72121M-D
IC251	409 415 8609	IC LC72720N (XE)
IC411	409 426 1804	IC KIA4558S
IC413	409 442 1505	IC YSS247-E,SURROUND
IC414	409 353 8709	IC BU4052BCF
IC458	409 431 2506	IC LC75385NE-R
IC459	409 426 1804	IC KIA4558S
IC470	⚠ 409 437 8007	IC STK411-200E
L2151	614 255 5798	TRANS,RF
L2152	614 255 5781	TRANS,RF
L2153	614 255 5767	TRANS,OSC
L2154	614 255 5774	TRANS,OSC
L2301	645 004 0580	INDUCTOR,1M J
L2451	645 001 4581	INDUCTOR,100U K
or	645 031 7842	INDUCTOR,100U K
L2501	645 001 4581	NDUCTOR,100U K (XE)
or	645 031 7842	NDUCTOR,100U K (XE)
L2502	645 001 4581	NDUCTOR,100U K (XE)
or	645 031 7842	NDUCTOR,100U K (XE)
L2901	645 004 0511	INDUCTOR,270U J
L4700	614 202 1712	V.H.F COIL
or	614 196 9763	V.H.F COIL
L4800	614 202 1712	V.H.F COIL
or	614 196 9763	V.H.F COIL
Q2140	405 141 3307	TR KTC3198-GR
or	405 141 3208	TR KTC3198-Y
or	405 020 7402	TR 2SC945A-P
or	405 020 7204	TR 2SC945A-K
Q2152	405 141 3307	TR KTC3198-GR
or	405 141 3208	TR KTC3198-Y
or	405 020 7402	TR 2SC945A-P
or	405 020 7204	TR 2SC945A-K
Q2153	405 141 3307	TR KTC3198-GR
or	405 141 3208	TR KTC3198-Y

REF.NO.	PART NO.	DESCRIPTION
or	405 020 7402	TR 2SC945A-P
or	405 020 7204	TR 2SC945A-K
Q2154	405 141 3307	TR KTC3198-GR
or	405 141 3208	TR KTC3198-Y
or	405 020 7402	TR 2SC945A-P
or	405 020 7204	TR 2SC945A-K
Q2155	405 141 3307	TR KTC3198-GR
or	405 141 3208	TR KTC3198-Y
or	405 020 7402	TR 2SC945A-P
or	405 020 7204	TR 2SC945A-K
Q2156	405 141 3307	TR KTC3198-GR
or	405 141 3208	TR KTC3198-Y
or	405 020 7402	TR 2SC945A-P
or	405 020 7204	TR 2SC945A-K
Q2157	405 026 9004	TR 2SK222-D
Q2201	405 151 4103	TR KTC3193-Y
or	405 016 0806	TR 2SC2839-E
Q2310	405 141 3307	TR KTC3198-GR
or	405 141 3208	TR KTC3198-Y
or	405 020 7402	TR 2SC945A-P
or	405 020 7204	TR 2SC945A-K
Q2451	405 151 5209	TR KRA107M
or	405 078 2404	TR BN1A4P
or	405 000 0904	TR DTA114YS
Q2452	405 151 5209	TR KRA107M
or	405 078 2404	TR BN1A4P
or	405 000 0904	TR DTA114YS
Q2453	405 151 5209	TR KRA107M
or	405 078 2404	TR BN1A4P
or	405 000 0904	TR DTA114YS
Q2501	405 141 3307	TR KTC3198-GR (XE)
or	405 141 3208	TR KTC3198-Y (XE)
or	405 020 7402	TR 2SC945A-P (XE)
or	405 020 7204	TR 2SC945A-K (XE)
Q2502	405 151 5209	TR KRA107M (XE)
or	405 078 2404	TR BN1A4P (XE)
or	405 000 0904	TR DTA114YS (XE)
Q4110	405 141 3307	TR KTC3198-GR
or	405 141 3208	TR KTC3198-Y
or	405 020 7402	TR 2SC945A-P
or	405 020 7204	TR 2SC945A-K
or	405 012 2002	TR 2SC1815-GR
Q4150	405 141 3307	TR KTC3198-GR
or	405 141 3208	TR KTC3198-Y
or	405 020 7402	TR 2SC945A-P
or	405 020 7204	TR 2SC945A-K
or	405 012 2002	TR 2SC1815-GR
Q4151	405 141 3307	TR KTC3198-GR
or	405 141 3208	TR KTC3198-Y
or	405 020 7402	TR 2SC945A-P
or	405 020 7204	TR 2SC945A-K
or	405 012 2002	TR 2SC1815-GR
Q4401	405 141 3307	TR KTC3198-GR
or	405 141 3208	TR KTC3198-Y
or	405 020 7402	TR 2SC945A-P
or	405 020 7204	TR 2SC945A-K
or	405 012 2002	TR 2SC1815-GR
Q4410	405 141 3307	TR KTC3198-GR
or	405 141 3208	TR KTC3198-Y
or	405 020 7402	TR 2SC945A-P
or	405 020 7204	TR 2SC945A-K
or	405 012 2002	TR 2SC1815-GR
Q4411	405 141 3307	TR KTC3198-GR
or	405 141 3208	TR KTC3198-Y
or	405 020 7402	TR 2SC945A-P
or	405 020 7204	TR 2SC945A-K
or	405 012 2002	TR 2SC1815-GR
Q4431	405 141 3406	TR KTA1266-GR

PARTS LIST

REF.NO.	PART NO.	DESCRIPTION
or	405 141 3505	TR KTA1266-Y
or	405 005 2002	TR 2SA733-P
or	405 005 1906	TR 2SA733-K
or	405 004 4502	TR 2SA608-F-NP
or	405 004 5004	TR 2SA608-G-NP
Q4432	405 141 3307	TR KTC3198-GR
or	405 141 3208	TR KTC3198-Y
or	405 020 7402	TR 2SC945A-P
or	405 020 7204	TR 2SC945A-K
or	405 012 2002	TR 2SC1815-GR
Q4433	405 141 3307	TR KTC3198-GR
or	405 141 3208	TR KTC3198-Y
or	405 020 7402	TR 2SC945A-P
or	405 020 7204	TR 2SC945A-K
or	405 012 2002	TR 2SC1815-GR
Q4434	405 141 3307	TR KTC3198-GR
or	405 141 3208	TR KTC3198-Y
or	405 020 7402	TR 2SC945A-P
or	405 020 7204	TR 2SC945A-K
or	405 012 2002	TR 2SC1815-GR
Q4435	405 141 3307	TR KTC3198-GR
or	405 141 3208	TR KTC3198-Y
or	405 020 7402	TR 2SC945A-P
or	405 020 7204	TR 2SC945A-K
or	405 012 2002	TR 2SC1815-GR
Q4436	405 141 3307	TR KTC3198-GR
or	405 141 3208	TR KTC3198-Y
or	405 020 7402	TR 2SC945A-P
or	405 020 7204	TR 2SC945A-K
or	405 012 2002	TR 2SC1815-GR
Q4438	405 141 3307	TR KTC3198-GR
or	405 141 3208	TR KTC3198-Y
or	405 020 7402	TR 2SC945A-P
or	405 020 7204	TR 2SC945A-K
or	405 012 2002	TR 2SC1815-GR
Q4439	405 141 3307	TR KTC3198-GR
or	405 141 3208	TR KTC3198-Y
or	405 020 7402	TR 2SC945A-P
or	405 020 7204	TR 2SC945A-K
or	405 012 2002	TR 2SC1815-GR
Q4500	405 151 4400	TR KTD1303
or	405 021 0600	TR 2SD1012-G-SPA
Q4595	405 141 3307	TR KTC3198-GR
or	405 141 3208	TR KTC3198-Y
or	405 020 7402	TR 2SC945A-P
or	405 020 7204	TR 2SC945A-K
or	405 012 2002	TR 2SC1815-GR
Q4600	405 151 4400	TR KTD1303
or	405 021 0600	TR 2SD1012-G-SPA
Q4695	405 141 3307	TR KTC3198-GR
or	405 141 3208	TR KTC3198-Y
or	405 020 7402	TR 2SC945A-P
or	405 020 7204	TR 2SC945A-K
or	405 012 2002	TR 2SC1815-GR
Q4700	405 151 4400	TR KTD1303
or	405 021 0600	TR 2SD1012-G-SPA
Q4701	405 141 3307	TR KTC3198-GR
or	405 141 3208	TR KTC3198-Y
or	405 020 7402	TR 2SC945A-P
or	405 020 7204	TR 2SC945A-K
or	405 012 2002	TR 2SC1815-GR
Q4702	405 141 3406	TR KTA1266-GR
or	405 141 3505	TR KTA1266-Y
or	405 005 2002	TR 2SA733-P
or	405 005 1906	TR 2SA733-K
or	405 004 4502	TR 2SA608-F-NP
or	405 004 5004	TR 2SA608-G-NP
Q4800	405 151 4400	TR KTD1303
or	405 021 0600	TR 2SD1012-G-SPA
Q4920	405 141 3406	TR KTA1266-GR
or	405 141 3505	TR KTA1266-Y
or	405 005 2002	TR 2SA733-P
or	405 005 1906	TR 2SA733-K
or	405 004 4502	TR 2SA608-F-NP
or	405 004 5004	TR 2SA608-G-NP
Q4921	405 141 3406	TR KTA1266-GR
or	405 141 3505	TR KTA1266-Y
or	405 005 2002	TR 2SA733-P
or	405 005 1906	TR 2SA733-K
or	405 004 4502	TR 2SA608-F-NP
or	405 004 5004	TR 2SA608-G-NP
Q4940	⚠ 405 138 6403	TR KTD2058Y
Q4941	405 141 3307	TR KTC3198-GR
or	405 141 3208	TR KTC3198-Y
or	405 020 7402	TR 2SC945A-P
or	405 020 7204	TR 2SC945A-K
or	405 012 2002	TR 2SC1815-GR
Q4960	405 141 3307	TR KTC3198-GR
or	405 141 3208	TR KTC3198-Y
or	405 020 7402	TR 2SC945A-P
or	405 020 7204	TR 2SC945A-K
or	405 012 2002	TR 2SC1815-GR
Q4961	405 141 3307	TR KTC3198-GR
or	405 141 3208	TR KTC3198-Y
or	405 020 7402	TR 2SC945A-P
or	405 020 7204	TR 2SC945A-K
or	405 012 2002	TR 2SC1815-GR
Q4962	⚠ 405 138 6403	TR KTD2058Y
R4437	614 241 3449	RESISTOR 0.22 K- 5W
R4438	614 241 3449	RESISTOR 0.22 K- 5W
R4586	⚠ 402 081 9109	FUSIBLE RES 39 J- 1/4W
R4706	⚠ 402 081 0403	RESISTOR 4.7 J- 2W
R4707	⚠ 402 081 0502	RESISTOR 330 J- 3W
R4716	⚠ 402 081 1103	FUSIBLE RES 100 JA 1/4W
R4717	⚠ 402 081 1103	FUSIBLE RES 100 JA 1/4W
R4718	⚠ 402 081 0403	RESISTOR 4.7 J- 2W
R4750	614 241 3449	RESISTOR 0.22 K- 5W
R4806	⚠ 402 081 0403	RESISTOR 4.7 J- 2W
R4807	⚠ 402 081 0502	RESISTOR 330 J- 3W
R4818	⚠ 402 081 0403	RESISTOR 4.7 J- 2W
R4850	614 241 3449	RESISTOR 0.22 K- 5W
R4920	⚠ 402 081 1103	FUSIBLE RES 100 JA 1/4W
R4940	⚠ 402 081 8904	RESISTOR 1 J- 1/2W
R4963	⚠ 402 081 0601	RESISTOR 1K J- 2W
R4964	⚠ 402 081 8904	RESISTOR 1 J- 1/2W
RY441	614 224 4531	RELAY,SPEAKER
or	645 035 6582	RELAY,SPEAKER
S4900	614 215 9828	SWITCH,TACT,RESET
T2301	614 255 8119	FILTER,LC
U2101	645 033 5327	TUNER,FM
X2301	645 010 0024	OSC,CERAMIC 456KHZ
or	614 246 0870	RESONATOR
X2451	645 023 4965	OSC,CRYSTAL 7.2MHZ
X2501	645 035 8326	OSC,CRYSTAL 4.332MHZ (XE)
XF221	645 010 0079	CERAMIC FILTER 10.70MHZ
or	614 240 2917	FILTER,CERAM
or	614 254 3214	FILTER
XF222	645 010 0079	CERAMIC FILTER 10.70MHZ
or	614 240 2917	FILTER,CERAMIC
or	614 254 3214	FILTER
XF231	614 246 0849	FILTER
XF233	645 018 8824	DISCR,CERAMIC
or	645 018 8718	DISCR,CERAMIC

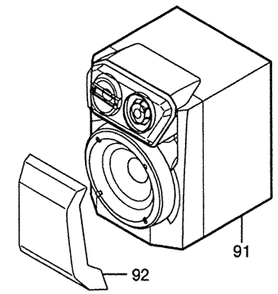
PARTS LIST

SUB TRANSFORMER P.W.BOARD ASSY

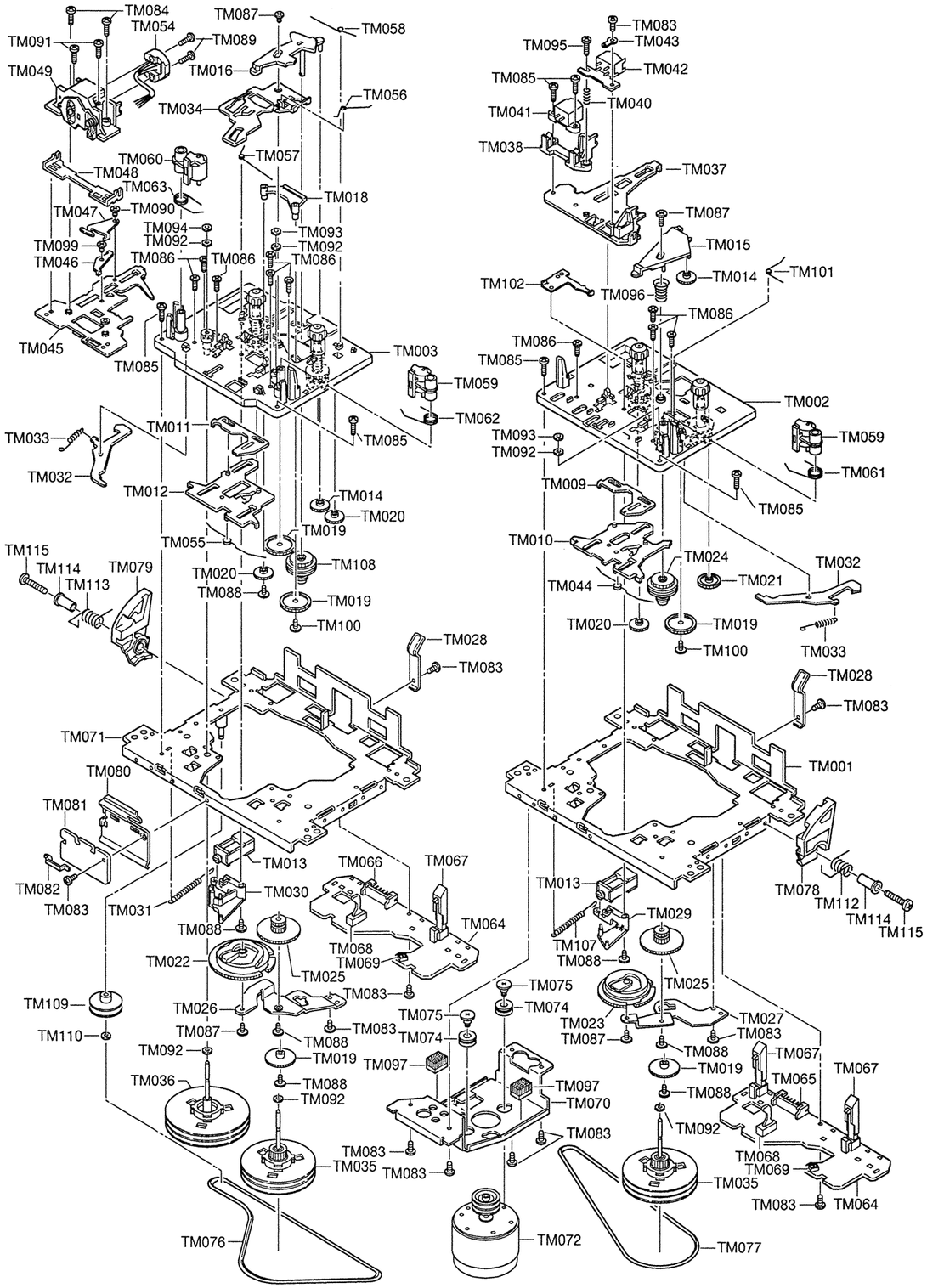
REF.NO.	PART NO.	DESCRIPTION
81	614 302 6600	ASSY,PWB,SUB TRANS (Only Initial)
C4311	403 313 4602	ELECT 1000U M 16V
C4316	⚠ 404 033 3401	CERAMIC 0.01U Z 400V
or	⚠ 404 033 3302	CERAMIC 0.01U M 400V
or	⚠ 404 000 1607	CERAMIC 0.01U F 400V
C4320	403 313 4602	ELECT 1000U M 16V
CN335	614 017 8203	TERMINAL BOARD
CN336	614 017 8203	TERMINAL BOARD
CN337	614 017 8203	TERMINAL BOARD
CN338	614 017 8203	TERMINAL BOARD
CN432	645 005 8110	PLUG,4P
or	645 007 0075	PLUG,4P
D4300	407 012 4406	DIODE 1SS133
D4308	407 012 4406	DIODE 1SS133
D4309	⚠ 407 148 6701	DIODE 1A3-I
D4310	⚠ 407 148 6701	DIODE 1A3-I
D4311	⚠ 407 148 6701	DIODE 1A3-I
D4312	⚠ 407 148 6701	DIODE 1A3-I
D4320	⚠ 407 148 6701	DIODE 1A3-I
D4321	⚠ 407 148 6701	DIODE 1A3-I
D4322	407 099 5402	ZENER DIODE MTZJ6.2B
D4350	407 125 9008	ZENER DIODE MTZJ2.0A
D4352	407 012 4406	DIODE 1SS133
IC430	⚠ 409 448 9000	IC KIA78DL05PI
L4300	⚠ 614 234 2800	INDUCTOR,FERITE
Q4300	405 141 3307	TR KTC3198-GR
or	405 141 3208	TR KTC3198-Y
or	405 020 7402	TR 2SC945A-P
or	405 020 7204	TR 2SC945A-K
or	405 012 2002	TR 2SC1815-GR
Q4320	405 141 3307	TR KTC3198-GR
or	405 141 3208	TR KTC3198-Y
or	405 020 7402	TR 2SC945A-P
or	405 020 7204	TR 2SC945A-K
or	405 012 2002	TR 2SC1815-GR
Q4350	405 141 3406	TR KTA1266-GR
or	405 141 3505	TR KTA1266-Y
or	405 005 2002	TR 2SA733-P
or	405 005 1906	TR 2SA733-K
or	405 004 4502	TR 2SA608-F-NP
or	405 004 5004	TR 2SA608-G-NP
Q4351	405 141 3406	TR KTA1266-GR
or	405 141 3505	TR KTA1266-Y
or	405 005 2002	TR 2SA733-P
or	405 005 1906	TR 2SA733-K
or	405 004 4502	TR 2SA608-F-NP
or	405 004 5004	TR 2SA608-G-NP
RY431	⚠ 645 030 5597	RELAY,PRIMARY
or	⚠ 645 035 6575	RELAY,PRIMARY
T4301	⚠ 645 033 8595	TRANS,POWER

SPEAKERS(SX-C70L,R)

REF.NO.	PART NO.	DESCRIPTION
91	614 304 5168	ASSY,BOX,SPEAKER (LEFT) (UK)
91	614 304 5175	ASSY,BOX,SPEAKER (LEFT) (XE)
91	614 304 5182	ASSY,BOX,SPEAKER (RIGHT) (UK)
91	614 304 5199	ASSY,BOX,SPEAKER (RIGHT) (XE)
92	614 304 5274	ASSY,GRILLE



EXPLODED VIEW (TAPE MECHANISM)

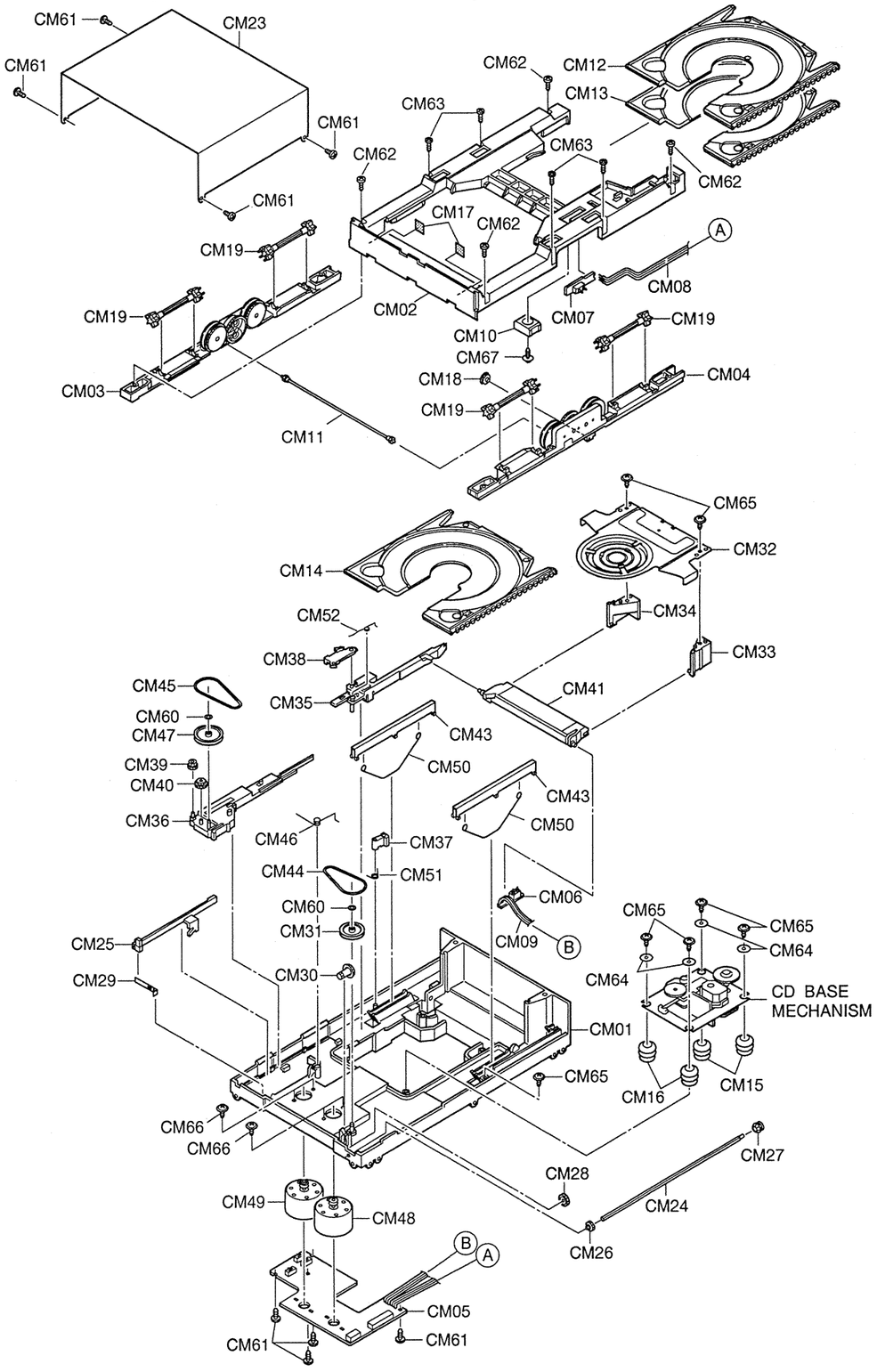


PARTS LIST

TAPE MECHANISM (TM-C50PRMEC-SH...Only Initial)

REF.NO.	PART NO.	DESCRIPTION
TM001	645 024 1970	MECHA-CHASSIS
TM002	645 027 9324	ASSY,MOLD-CHASSIS
TM003	645 027 5388	MOLD-CHASSISS-ASSY
TM009	645 024 1963	SELECT-LEVER
TM010	645 027 9348	ASSY,SELECT-BASE
TM011	645 024 2007	SELECT-LEVER
TM012	645 028 0078	ASSY,SELECT-BASE
TM013	645 024 2038	SOLENOID
TM014	645 025 6301	SEND-GEAR(B)
TM015	645 027 8839	CENTER-ARM
TM016	645 027 9003	CENTER-ARM
TM018	645 027 9010	FWD-ARM
TM019	645 024 2144	SEND-GEAR(A)
TM020	645 025 6295	SEND-GEAR(B)
TM021	645 024 2113	SEND-GEAR(C)
TM022	645 024 2120	ASSIST-GEAR
TM023	645 027 8846	ASSIST-GEAR
TM024	645 028 0559	ASSY,FF-GEAR
TM025	645 024 2229	ASSY,CENTER-GEAR
TM026	645 024 2267	PROTECT-STAY
TM027	645 027 8884	PROTECT-STAY
TM028	645 024 2243	CST-HOLDER-SP
TM029	645 024 2168	TRIGGER-ARM
TM030	645 024 2236	TRIGGER-ARM
TM031	645 027 8877	TRIGGER-ARM-SP
TM032	645 027 8860	EJECT-LOCK
TM033	645 024 2182	EJECT-LOCK-SP
TM034	645 027 9065	REV-PLATE
TM035	645 025 5915	ASSY,FW-GEAR
TM036	645 029 6277	ASSY,FW
TM037	645 027 5395	HEAD-BASE-ASSY
TM038	645 024 2380	HEAD-SPACER
TM040	645 024 2397	AZIMUTH-SP
TM041	645 033 3354	HEAD,ERASE
TM042	614 293 6634	HEAD,R/P
TM043	645 024 2311	EARTH-LUG D2
TM044	645 027 8853	HEAD-BASE-SP
TM045	645 024 2458	ASSY,HEAD-BASE
TM046	645 024 2540	REV-PLATE(B)
TM047	645 024 2557	REV-PLATE(A)
TM048	645 024 2465	PINCH-PLATE
TM049	645 027 5371	HEAD-GUIDE-ASSY
TM054	645 036 3726	HEAD,PLAY,AUDIO
TM055	645 027 9126	HEAD-BASE-SP
TM056	645 027 9157	REV-SP
TM057	645 027 9072	CENTER-BASE-SP(A)
TM058	645 027 9089	CENTER-BASE-SP(B)
TM059	645 028 0030	ASSY,PINCH-ARM
TM060	645 028 0542	ASSY,PINCH-ARM
TM061	645 024 2359	PINCH-SP
TM062	645 027 9140	PINCH-SP
TM063	645 027 9133	PINCH-SP
TM064	645 027 9119	SENSOR-PCB
TM065	645 024 2762	CONNECTOR S7B-PH-K-S
TM066	645 025 5922	CONNECTOR S6B-PH-K-S
TM067	645 025 6141	LEAF SW MXS00821MPP0
TM068	645 024 2335	PUSH-SW MPU10190MLB0
TM069	645 024 2328	PHOTO-SENSOR GP2S24C
TM070	645 024 2427	MOTOR-BKT
TM071	645 029 6260	ASSY,MECHA-CHASSIS
TM072	614 293 9505	ASSY,MOTOR,PLAY MECHA MOTOR
TM074	645 024 3172	RUBBER-CUSHION
TM075	645 024 3165	MOTOR-SCREW
TM076	645 029 6246	MAIN-BELT
TM077	645 025 5892	MAIN-BELT
TM078	614 303 2953	LOCK-CAM-R
TM079	614 303 2960	LOCK-CAM-L
TM080	645 027 9102	SHIELD-PLATE(A)
TM081	645 027 9096	HEAD-PCB
TM082	645 024 3226	WIRE-CLAMP
TM083	645 025 6134	BIND SCREW
TM084	645 024 3141	BIND-SCREW
TM085	645 024 3158	BIND-SCREW
TM086	645 024 3127	SCREW
TM087	645 024 3257	SCREW
TM088	645 024 3103	SCREW
TM089	645 024 3110	SCREW
TM090	645 024 3080	SCREW
TM091	645 024 3233	AZIMUTH SCREW
TM092	645 027 8914	P-WASHER
TM093	645 027 8907	L-CUT-WASHER
TM094	645 028 0528	L-CUT-WASHER
TM095	645 028 0535	SCREW
TM096	645 024 2069	PRESSURE-SP
TM097	645 025 5908	MAT
TM099	645 027 9041	SCREW
TM100	645 027 9034	HEADER SCREW
TM101	645 027 8938	FWD-ARM-SP
TM102	645 027 8990	F/R-LOCK-PLATE
TM107	645 027 9058	TRIGGER-ARM-SP
TM108	645 028 0108	ASSY,FF-GEAR
TM109	645 029 6291	TENSION-PULLEY
TM110	645 029 6253	P-CUT-WASHER
TM112	614 303 2991	LOCK-CAM-SP-R
TM113	614 303 2984	LOCK-CAM-SP-L
TM114	614 303 2977	COLLAR
TM115	614 303 2946	SCREW

EXPLODED VIEW (CD CHANGER MECHANISM)



PARTS LIST

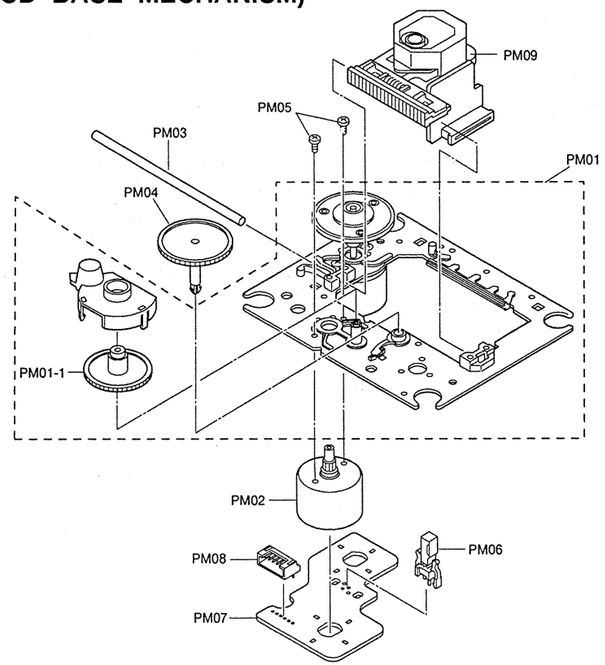
CD CHANGER MECHANISM (PM-CDC10TP-SH ... Only Initial)

REF.NO.	PART NO.	DESCRIPTION
CM01	645 033 6072	ASSY,CHASSIS
CM02	645 033 7512	DRAWER 2
CM03	645 033 5976	ASSY,HOLDER L,DRAWER
CM04	645 033 6898	ASSY,HOLDER R3B,DRAWER
CM05	645 033 6041	ASSY,PC BOARD A
CM06	645 033 6065	ASSY,PC BOARD B
CM07	645 033 6058	ASSY,PC BOARD C
CM08	645 033 5945	LEAD WIRE
CM09	645 033 5952	LEAD WIRE
CM10	645 033 6713	SPACER SW
CM11	645 033 6027	ASSY,GEAR DRIVE,SINCHRO
CM12	645 033 6904	ASSY,CRG 100,CARRIAGE NO.1
CM13	645 033 6911	ASSY,CRG 200
CM14	645 033 6928	ASSY,CRG 300
CM15	645 033 5877	INSULATER
CM16	645 033 5884	INSULATER
CM17	645 033 5907	CUSHION
CM18	645 033 6324	BEVEL GEAR 4
CM19	645 033 5990	ASSY,GEAR STAR,CARRIAGE LIFT
CM23	645 033 6089	COVER 2
CM24	645 033 6539	SHAFT
CM25	645 033 6461	SLIDER 4
CM26	645 033 6201	GEAR SPLINE
CM27	645 033 6232	BEVEL GEAR 1
CM28	645 033 6270	GEAR IDLER 1
CM29	645 033 6102	PLATE SPRING
CM30	645 033 6287	BEVEL GEAR 3
CM31	645 033 6225	PULLEY C
CM32	645 033 6034	ASSY,CLAMPER
CM33	645 033 6140	ARM SLIDER R
CM34	645 033 6157	ARM SLIDER L
CM35	645 033 6430	SLIDER 1
CM36	645 033 5969	ASSY,SLIDER 2,FWD/RVS
CM37	645 033 6980	ARM STOPPER A2
CM38	645 033 6416	ARM STOPPER B
CM39	645 033 6263	GEAR IDLER A2
CM40	645 033 6218	GEAR IDLER C
CM41	645 033 6447	LEVER
CM43	645 033 6454	LIFTER,CARRIGE LIFT UP
CM44	645 033 5778	BELT
CM45	645 033 5785	BELT
CM46	645 033 7048	SPRING
CM47	645 033 6393	PULLEY A
CM48	645 033 6003	ASSY,MOTOR CARRIGE
CM49	645 033 6010	ASSY,MOTOR DRAWER
CM50	645 033 5723	SPRING
CM51	614 303 7545	SPRING
CM52	645 033 5747	SPRING
CM60	645 033 5648	WASHER
CM61	645 033 5594	SCREW
CM62	645 033 7031	SCREW
CM63	645 033 5563	SCREW
CM64	645 033 5631	WASHER
CM65	645 033 5570	SCREW
CM66	645 033 5600	SCREW
CM67	645 033 5617	SCREW

CD BASE MECHANISM (CD213CCM-SNSH ... Only Initial)

REF.NO.	PART NO.	DESCRIPTION
PM01	645 033 6751	ASSY,MOTOR CHASSIS,BASE
PM01-1	645 033 6812	GEAR B RP,SLED GEAR
PM02	645 033 6744	ASSY,MOTOR GEAR,SLED
PM03	645 033 6805	SLED SHAFT,PICK RAIL
PM04	645 033 6799	GEAR A S,PICK DRIVE GEAR
PM05	645 033 6829	SCREW+P2*3,SLED MOTOR FIX
PM06	645 033 6775	LEAF SWITCH,LIMIT SWITCH
PM07	645 033 6782	MOTOR 6P S PWB
PM08	645 033 6768	CONNECTOR PIN 6P
PM09	614 303 5626	PICK UP

EXPLODED VIEW (CD BASE MECHANISM)



IC BLOCK DIAGRAM & DESCRIPTION

IC101 LA9240ML (Servo Signal Processor)

No.	Pin Name	I/O	Function
1	FIN2	I	Connection Pin for Photo Diode of Pickup.
2	FIN1	I	FIN2 + FIN1 = RF, FIN2 - FIN1 = FE
3	E	I	Connection Pin for Photo Diode of Pickup.
4	F	I	E - F = TE
5	TB	I	Input Pin for DC ingredient of TE Signal.
6	TE-	I	Connection Pin for Gain Setting Resistor of TE Signal to TE Signal Pin.
7	TE	O	Output Pin for Tracking Error Signal.
8	TESI	I	Input Pin for Track Error Sense Comparator. TE Signal through Band Pass, and Inputted.
9	SCI	I	Input Pin for Shock Detection.
10	TH	I	Connection Pin for Time Constant Setting of Tracking Gain.
11	TA	O	Output Pin for TA Amplifier.
12	TD-	I	Connection Pin for Constant Tracking Phase Compensation, Consist of between TD and VR.
13	TD	I	Connection Pin for Constant of Tracking Phase Compensation.
14	JP	I	Connection Pin for Amplitude Setting of Tracking Jump (Kick Pulse) Signal.
15	TO	O	Output Pin for Tracking Control Signal.
16	FD	O	Output Pin for Focusing Control Signal.
17	FD-	I	Connection Pin for Constant of Focusing Phase Compensation, Consist of between FD and FA.
18	FA+	I	Connection Pin for Constant of Focusing Phase Compensation, Consist of between FD- and FA-.
19	FA-	I	Connection Pin for Constant of Focusing Phase Compensation, Consist of between FA and FE.
20	FE	O	Output Pin for Focusing Error Signal.
21	FE-	I	Connection Pin for Gain Setting Resistor of FE Signal to FE Signal Pin.
22	AGND	-	Ground for Analog Signal.
23	SP	O	Output Pin for Single End of Input Signal of the CV+, CV- Pin.
24	SPI	I	Input Pin for Spindle Amplifier.
25	SPG	I	Connection Pin for Gain Setting Resistor, when Spindle 12 cm Mode.
26	SP-	I	Connection Pin for Constant of Spindle Phase Compensation with SPD Pin.
27	SPD	O	Output Pin for Spindle Control Signal.
28	SLEQ	I	Connection Pin for Constant of Sled Phase Compensation.
29	SLD	O	Output Pin for Sled Control Signal.
30	SL-	I	Input Pin for Sled Signal from Micro Processor.
31	SL+	I	
32	JP-	I	Input Pin for Tracking Jump Signal from Digital Signal Processor.
33	JP+	I	

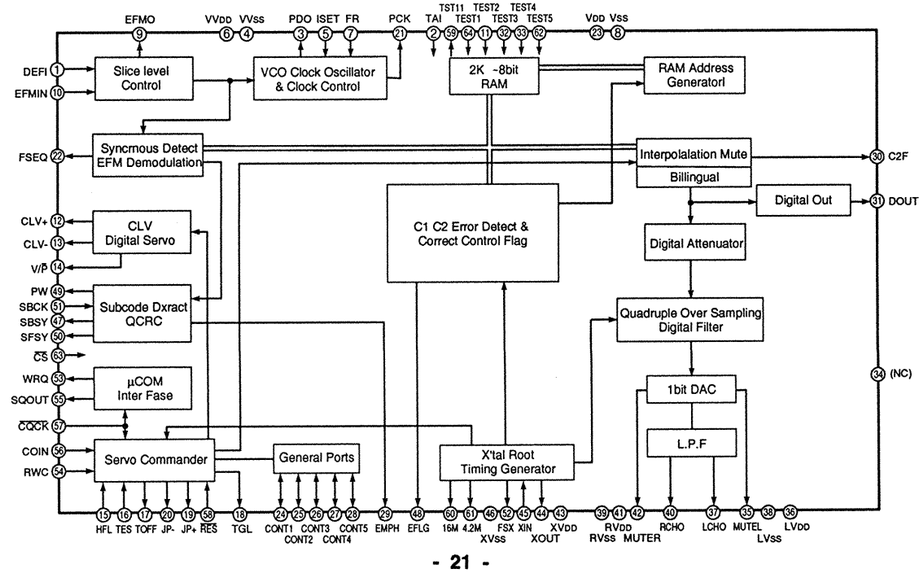
No.	Pin Name	I/O	Function
34	TGL	I	Input Pin for Tracking Gain Control Signal from Digital Signal Processor. TGL = H : Gain Low
35	TOFF	I	Input Pin for Tracking Off Control Signal from Digital Signal Processor. TOFF = H : OFF
36	TES	O	Output Pin for Track Error Sense Signal to Digital Signal Processor.
37	HFL	I	High Frequency Level Signal Use Detection Main-Beam Position is on the pit or mirror.
38	SLOF	I	Input Pin for Sled Servo Off Control.
39	CV-	I	Input Pin for Constant Linear Velocity Error
40	CV+	I	Signal from Digital Signal Processor.
41	RFSM	O	Output Pin for RF Signal.
42	RFS-	I	Connection Pin for Gain Setting of RF and Constant Setting of 3T Compensation of the EFM Signal with RFSM Pin.
43	SLC	O	Slice Level Control Signal is Output Pin. It Control Level of Data-Slice by Digital Signal Processor of the RF Waveform.
44	SLI	I	Input Pin for Level Control of Data-Slice by Digital Signal Processor.
45	DGND	-	Ground for Digital Signal.
46	FSC	O	Output Pin for Focus Search Smooth Condenser
47	TBC	O	Connection Pin for Variable Range Setting of EF Balance.
48	NC	-	No Connect
49	DEF	O	Output Pin for Defect Detection of Disc.
50	CLK	I	Input Pin for Reference Clock Pulse. (4.23 MHz of Digital Signal Processor)
51	CL	I	Input Pin of Clock Pulse for Command from Micro Processor.
52	DAT	I	Input Pin of Data for Command from Micro Processor.
53	CE	I	Input Pin of Chip Enable for Command from Micro Processor.
54	DRF	O	Output Pin for Detect of RF Level.
55	FSS	I	Select Pin for Focus Search Mode
56	VCC2	-	VCC for Servo and Digital Root.
57	REFI	I	Bus Control Connection Pin for Reference Voltage.
58	VR	O	Output Pin for Reference Voltage.
59	LF2	I	Connection Pin for Time Constant Setting of Detect Detection of the Disc.
60	PH1	I	Capacitor Connection Pin for Peak-hold of RF Signal.
61	BH1	I	Capacitor Connection Pin for Bottom-hold of RF Signal.
62	LDD	O	Output Pin of APC (Automatic Power Control) Circuit.
63	LDS	I	Input Pin of APC (Automatic Power Control) Circuit.
64	VCC1	I	VCC for RF Root.

IC BLOCK DIAGRAM & DESCRIPTION

IC102 LC78622NE (Digital Signal Processor)

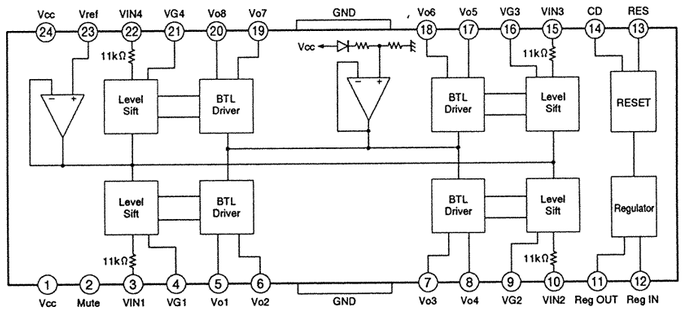
No.	Pin Name	I/O	Function
1	DEFI	I	Input terminal for detect signal of defect
2	TAI	I	Input terminal for test.
3	PDO	O	The phase comparison output terminal for external VCO control.
4	VVSS	-	Ground terminal for built-in VCO
5	ISET	I	Resistance connection terminal for electric current adjustment of PDO output.
6	VVDD	-	Built-in VCO power supply terminal.
7	FR	I	VCO frequency range adjustment.
8	VSS	-	Ground for Digital
9	EFMO	O	EFM signal output terminal for slice level control.
10	EFMIN	I	EFM signal input terminal for slice level control.
11	TEST2	I	TEST pin. Normal time is non connection.
12	CLV+	O	Output terminal for Disc motor control.
13	CLV-	O	Output terminal for Disc motor control.
14	V/P	O	Change of rough servo / phase control Rough servo : "H", Phase control : "L"
15	HFL	I	Input terminal of track search signal.
16	TES	I	Input terminal of tracking error signal.
17	TOFF	O	Output terminal of tracking off.
18	TGL	O	Output terminal for change of tracking gain.
19	JP+	O	Output terminal for tracking jump control.
20	JP-	O	Output terminal for tracking jump control.
21	PCK	O	Clock monitor output terminal for EFM data playback. (4.3218 MHz)
22	FSEQ	O	Output terminal for detect of SYNC signal.
23	DVDD	-	+5V
24	CONT1	I/O	This output can control at serial control from micro processor.
25	CONT2	I/O	
26	CONT3	I/O	
27	CONT4	I/O	
28	CONT5	I/O	
29	EMPH	O	Output terminal of de-emphasis monitor . "H" : de-emphasis
30	C2F	O	Output terminal of C2 flag
31	DOUT	O	Output terminal of digital out

No.	Pin Name	I/O	Function
32	TEST3	I	Test pin.
33	TEST4	I	Test pin.
34	NC	-	Non connection.
35	MUTEL	O	Mute output terminal for L-ch
36	LVDD	-	Power supply for L-ch
37	LCHO	O	Output terminal for L-ch
38	LVSS	-	GND for L-ch
39	RVSS	-	GND for R-ch
40	RCHO	O	Output terminal for R-ch
41	RVDD	-	Power supply for R-ch
42	MUTER	O	Mute output terminal for R-ch
43	XVDD	-	Power supply of crystal oscillation
44	XOUT	O	Connection terminal of crystal oscillation (16.9344MHz)
45	XIN	I	Connection terminal of crystal oscillation (16.9344MHz)
46	XVSS	-	GND of crystal oscillation
47	SBSY	O	Output terminal for synchronizing signal of sub-cord block
48	EFLG	O	Output terminal for correction monitor of C1, C2, Single and Double
49	PW	O	Output terminal for sub-cord of P, Q, R, S, T, U and W
50	SFSY	O	Output terminal for synchronizing signal of sub-cord frame
51	SBCK	I	Input terminal for readout clock of sub-cord
52	FSX	O	Output terminal of Synchronizing signal (7.35kHz)
53	WRQ	O	Output terminal for standby of sub-cord Q output
54	RWC	I	Input terminal of read / write control
55	SQOUT	O	Output terminal of sub-cord Q
56	COIN	I	Input terminal of command from micro processor
57	CQCK	I	Clock input for reading sub-cord from SQOUT
58	RES	I	Reset (turn on : L)
59	TST11	O	Test pin
60	16M	O	16.9344MHz
61	4.2M	O	4.2336MHz
62	TEST5	I	Test pin
63	CS	I	Chip select terminal
64	TEST1	I	Test pin

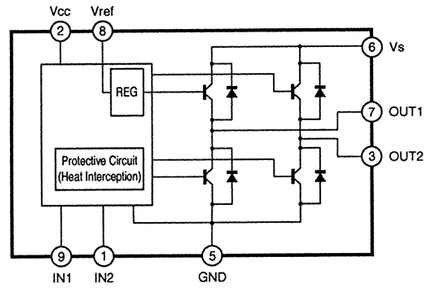

EFMO 9
VVDD 6 VVSS 4
PDO 3 ISET 5 FR 7
PCK 21
TAI 2 TST11 59 TEST1 64 TEST2 11 TEST3 32 TEST4 33 TEST5 62
VDD 23 VSS 8
DEFI 1
EFMIN 10
Slice level Control
VCO Clock Oscillator & Clock Control
2K -8bit RAM
RAM Address Generatorl
FSEQ 22
Syncmous Detect EFM Demodulation
Interpolalation Mute
Billingual
30 C2F
Digital Out
31 DOUT
CLV+ 12
CLV- 13
V/P 14
CLV Digital Servo
C1 C2 Error Detect & Correct Control Flag
Digital Attenuator
PW 49
SBCK 51
SBSY 47
SFSY 50
CS 63
WRQ 53
SQOUT 55
CQCK 57
Subcode Dxract QCRC
Quadruple Over Sampling Digital Filter
µCOM Inter Fase
1bit DAC
34 (NC)
COIN 56
RWC 54
Servo Commander
General Ports
X'tal Root Timing Generator
L.P.F
19 HFL 16 TES 17 TOFF 20 JP- 19 JP+ 58 RES 18 TGL 24 CONT1 25 CONT2 26 CONT3 27 CONT4 28 CONT5 29 EMPH 48 EFLG 60 16M 61 4.2M 46 FSX XVSS 45 XIN XOUT 44 XVDD 43 39 RVDD RVSS 41 42 MUTER 40 RCHO 37 LCHO 35 MUTEL 38 LVSS 36 LVDD

IC BLOCK DIAGRAM & DESCRIPTION

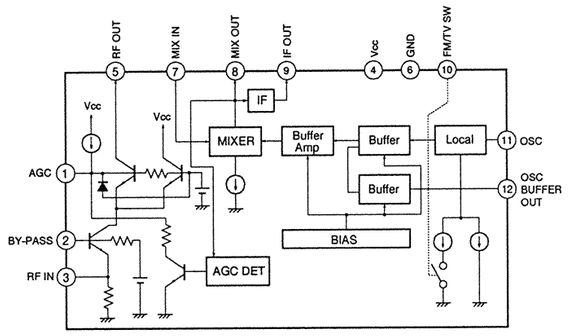
IC103 LA6541 (Pickup Actuator & CD Mechanism Motor)


Vcc Vref VIN4 VG4 Vo8 Vo7 GND Vo6 Vo5 VG3 VIN3 CD RES
11kΩ
Level Sift
BTL Driver
RESET
Regulator
Vcc Mute VIN1 VG1 Vo1 Vo2 GND Vo3 Vo4 VG2 VIN2 Reg OUT Reg IN

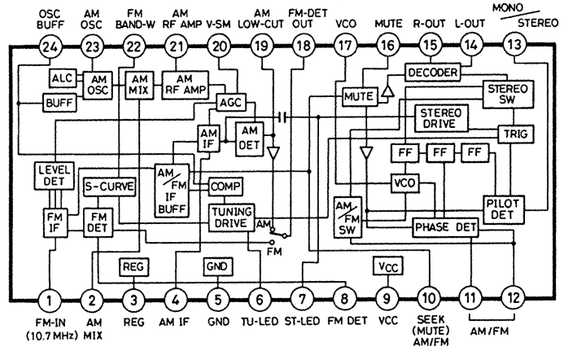
IC131, IC132 TA7291S (Bridge Driver)



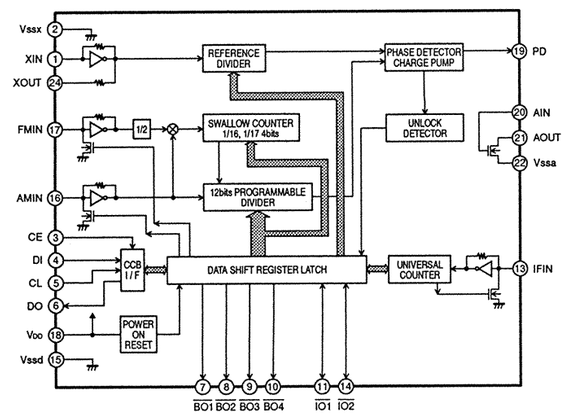
IC211 TA8176SN (FM Front End)



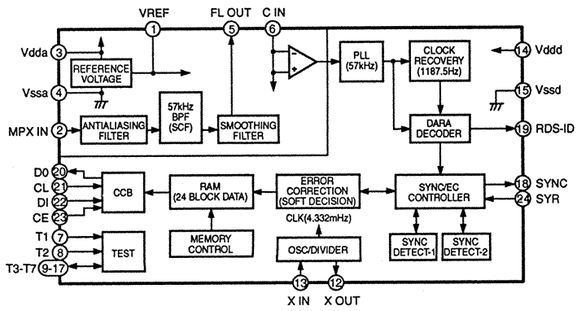
IC231 LA1832ML (AM / FM IF Amplifier & FM-MPX)



IC245 LC72121M (PLL Synthesizer)

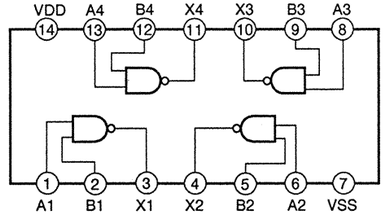


IC251 LC72720 (RDS Signal control)

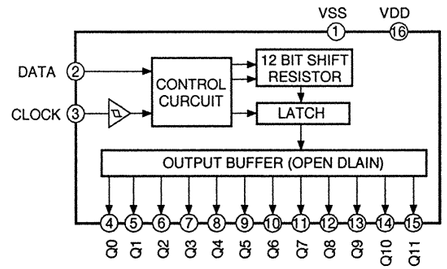


IC BLOCK DIAGRAM & DESCRIPTION

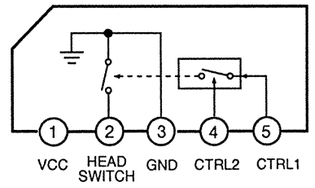
IC362 TC4011BF (NAND Gate)



IC361 BU2090F (12bit Serial Parallel Converter)

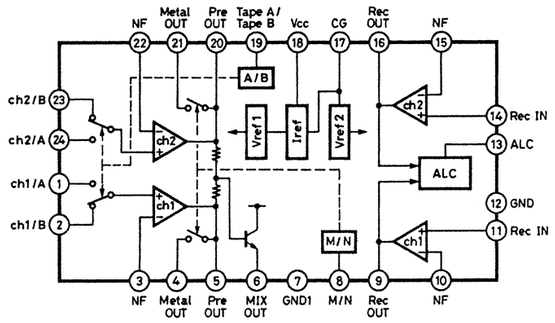


IC363 BA7755A (Head Switch)

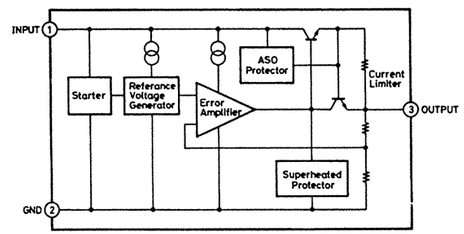


No.	Pin Name	Port Name	Function
1	VSS	VSS	Ground
2	DATA	D-OUT	Data input
3	CLOCK	EX1-CLK	Clock input
4	Q0	BEAT	Tape beat chancel output (L=Pos1, H=Pos.2)
5	Q1	OSC	Tape oscllation circuit control (L=OFF, H=ON)
6	Q2		
7	Q3	R-MUTE	Tape REC mute output (L=OFF, H=ON)
8	Q4	DECK-A/B	Deck A / B control (L=B, H=A)
9	Q5		
10	Q6	R/P	Tape Rec / Play control (L=Rec, H=Play)
11	Q7		
12	Q8	MOTOR	Tape motor output
13	Q9	A-PLY-PL	Dack A Play Plunger output
14	Q10	B-PLY-PL	Dack B Play Plunger output
15	Q11		
16	VDD	VDD	Power supply

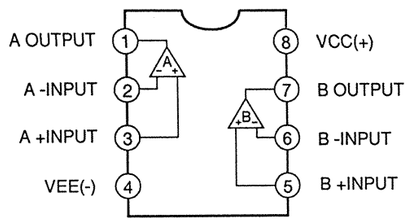
IC371 TA8189N (Pre-Amplifier for Tape Deck)


NF Metal OUT Pre OUT Tape A/ Tape B Vcc CG Rec OUT NF
A/B
ch2/B ch2/A ch1/A ch1/B
Vref1 Iref Vref2
ALC
M/N
Rec IN ALC GND Rec IN
NF Metal OUT Pre OUT MIX OUT GND1 M/N Rec OUT NF

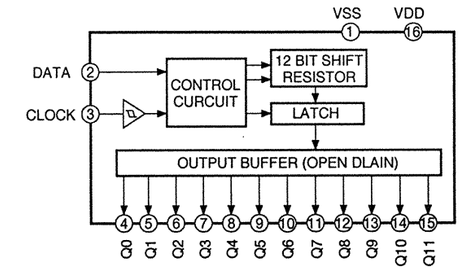
IC425 NJM7805FA (3-Terminal Voltage Regulator)



IC602, IC603 NJM4558M (Operation Amplifier)



IC604, IC605 BU2090F (12bit Serial Parallel Converter)



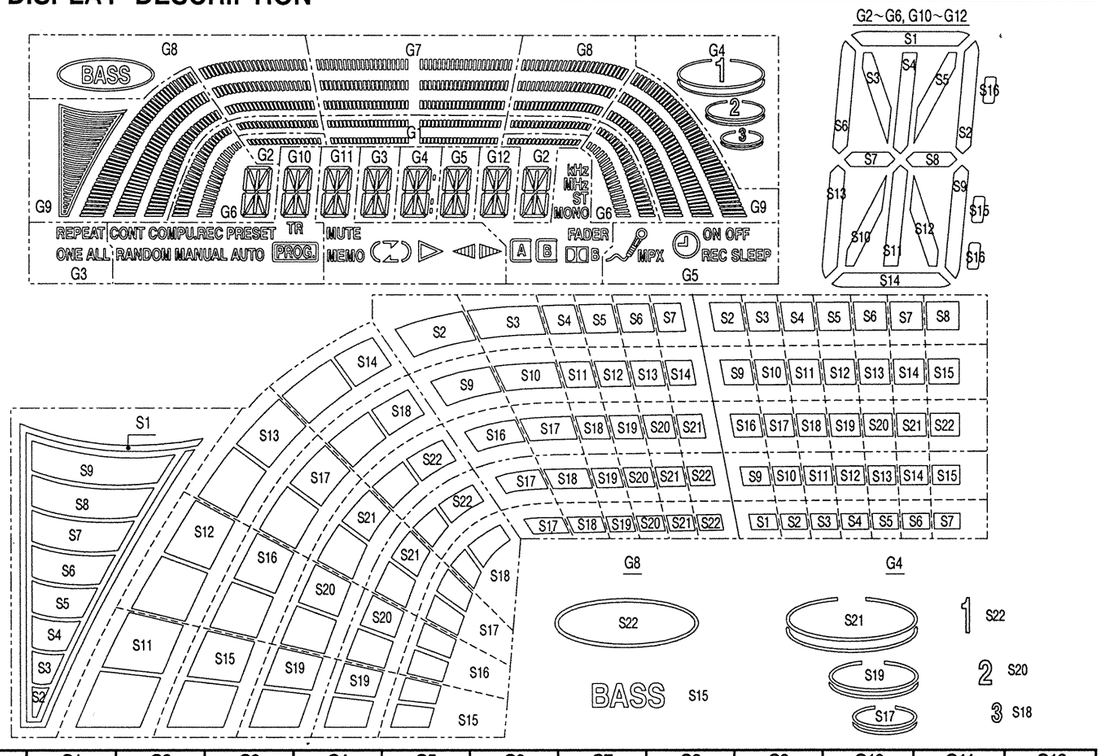
No.	Pin Name	Port Name	Function
1	VSS	VSS	Ground
2	DATA	D-OUT	Data input
3	CLOCK	EX2-CLK	Clock input
4	Q0	VF-KB	Output for Vocal fader control
5	Q1	VF-KC	Output for Vocal fader control
6	Q2	SOUND-2	Output for Surround LS1 control
7	Q3	SOUND-1	Output for Surround LS2 control
8	Q4	LED-0	POPS LED (L=ON)
9	Q5	LED-1	ROCK LED (L=ON)
10	Q6	LED-2	CLASSIC LED (L=ON)
11	Q7	LED-3	JAZZ LED (L=ON)
12	Q8	LED-4	CD Function LED (L=ON)
13	Q9	LED-5	Tape Function LED (L=ON)
14	Q10	LED-6	Tuner Function LED (L=ON)
15	Q11	LED-7	Video Function LED (L=ON)
16	VDD	VDD	Power supply

IC BLOCK DIAGRAM & DESCRIPTION

IC601 LC866548A (Micro Processor) . . . for UK
LC866556B (Micro Processor) . . . for XE

No.	Name	I/O	Function
1	JOG+	I	Input JogDial
2	JOG-	I	Input JogDial
3	D_CLK	O	Serial clock output for Tu/Vol_Func IC
4	D_OUT	O	Serial date output for Tu/Vol_Func/extend IC
5	EXI_CLK	O	Serial clock output for extend IC1(DECK)
6	EX2_CLK	O	Serial clock output for extend IC2(LED)
7	EX3_CLK	O	Serial clock output for extend IC3(LED)
8	VF_CE	O	Serial latch output for Vol_Func IC
9	TU_CE	O	Serial latch output for Tuner IC
10	TU_D1	I	Serial date output for Tuner IC
11	WD	I	Watchdog timer input
12	RESET	I	Reset terminal
13	XT1	I	Sub clock connection terminal
14	XT2	O	Sub clock connection terminal
15	VSS		Ground
16	CF1	I	Main clock connection terminal (6MHz)
17	CF2	O	Main clock connection terminal (6MHz)
18	VDD		Power supply (+5V)
19	KEY0	I	Key input
20	KEY1	I	Key input
21	KEY2	I	Key input
22	CD_SW0	I	SW input SW2(EXTRA) SW3(HOME)
23	CD_SW1	I	SW input SW4(C_No.) SW5(C_No.)
24	CD_SW2	I	SW input SW7(Fwd) SW8(Revs)
25	CD_SW3	I	SW input SW6(Open) Pick Limit switch
26	LEVEL	I	LEVEL input
27	WRQ	I	CD DSP interface (sub Q Request)
28	PROTECTOR	I	Set protector (Irregular:Low)
29	IR	I	Remote control input
30	Seg15	O	FL Segment output
31	Seg16	O	FL Segment output
32	Seg17	O	FL Segment output
33	Seg18	O	FL Segment output
34	Digit12	O	FL digit output
35	Digitl11	O	FL digit output
36	Digit10	O	FL digit output
37	Digit9	O	FL digit output
38	Digit8	O	FL digit output
39	Digit7	O	FL digit output
40	Digit6	O	FL digit output
41	Digit5	O	FL digit output
42	Digit 4	O	FL digit output
43	Digit3	O	FL digit output
44	Digit2	O	FL digit output
45	Digit1	O	FL digit output
46	VDD		Power supply (+5V)
47	Seg19	O	FL Segment output
48	Seg20	O	FL Segment output
49	Seg21	O	FL Segment output
50	Seg22	O	FL Segment output
51	VP		FL drive output power
52	Seg1	O	FL Segment output
53	Seg2	O	FL Segment output
54	Seg3	O	FL Segment output
55	Seg4	O	FL Segment output
56	Seg5	O	FL Segment output
57	Seg6	O	FL Segment output
58	Seg7	O	FL Segment output
59	Seg8	O	FL Segment output
60	Seg9	O	FL Segment output
61	Seg10	O	FL Segment output
62	Seg11	O	FL Segment output
63	Seg12	O	FL Segment output
64	Seg13	O	FL Segment output
65	Seg14	O	FL Segment output
66	SEL_RVS_A	I	Tape Mechanism select (Reverse=High, Normal =Low)
67	SEL_POW_RY	I	Power relay select (ON = high) . . . for UK
	RDS	I	RDS input . . . for XE
68	SEL_12_24	I	Timer display (24h=High 12h=Low)
69	MM_IN	I	Multimedia input input (ON = High)
70	V_CHK	I	Power suspension detection Power suspention = Low
71	C2F	I	C2Flag (DSP)
72	VDD		Power supply (+5V)
73	G_REVS	I	Failure record switch (Tape B side) (ON=Low)
74	G_FWD	I	Failure record switch (Tape A side) (ON=Low)
75	B_PACK	I	Tape set detection(B side) switch (ON=Low)
76	B_PALY	I	Play(B side) switch (ON=Low)
77	A_PACK	I	Tape set detection(A side) switch (ON=Low)
78	A_PLAY	I	Play(A side) switch (ON=Low)
79	A_REEL	I	Reel turn signal(A side)
80	B_REEL	I	Reel turn signal(B side)
81	POW_RY	O	Power relay control output (ON=High)
82	P_CON	O	Power control signal (Power on=high)
83	SP_RY	O	speaker relay control output
84	PRE_MUTE	O	PRE MUTE output (Mute on = High)
85	MAIN_MUTE	O	Main mute output (Mute on=High)
86	PULL_UP	O	pull-up power output (ON=Low)
87	DSP_RESET	O	Reset signal to DSP (CD)
88	CLK_SHIFT	O	Main clock shift
89	VSS		Ground
90	VDD		Power supply (+5V)
91	CARRIAGE+	O	CARRIAGE-MOTOR control output+
92	CARRIAGE-	O	CARRIAGE-MOTOR control output-
93	DRAWER+	O	DRAWER control output+
94	DRAWER-	O	DRAWER control output-
95	COIN	O	CD_DSP interface (command data output)
96	SQUT	I	CD_DSP interface (SubQ data input)
97	CQCK	O	CD_DSP interface (clock)
98	VD_GND	O	GND control output for micon power check
99	DRF	I	DRF signal input
100	RWC	O	CD_DSP interface (command latch)

FL DISPLAY DESCRIPTION



	G1	G2	G3	G4	G5	G6	G7	G8	G9	G10	G11	G12
S1	S1	S1	S1	S1	S1	S1	-	-	S1	S1	S1	S1
S2	S2	S2	S2	S2	S2	S2	S2	S2	S2	S2	S2	S2
S3	S3	S3	S3	S3	S3	S3	S3	S3	S3	S3	S3	S3
S4	S4	S4	S4	S4	S4	S4	S4	S4	S4	S4	S4	S4
S5	S5	S5	S5	S5	S5	S5	S5	S5	S5	S5	S5	S5
S6	S6	S6	S6	S6	S6	S6	S6	S6	S6	S6	S6	S6
S7	S7	S7	S7	S7	S7	S7	S7	S7	S7	S7	S7	S7
S8	-	S8	S8	S8	S8	S8	S8	-	S8	S8	S8	S8
S9	S9	S9	S9	S9	S9	S9	S9	S9	S9	S9	S9	S9
S10	S10	S10	S10	S10	S10	S10	S10	S10	-	S10	S10	S10
S11	S11	S11	S11	S11	S11	S11	S11	S11	S11	S11	S11	S11
S12	S12	S12	S12	S12	S12	S12	S12	S12	S12	S12	S12	S12
S13	S13	S13	S13	S13	S13	S13	S13	S13	S13	S13	S13	S13
S14	S14	S14	S14	S14	S14	S14	S14	S14	S14	S14	S14	S14
S15	S15	-	-	S15	-	S15	S15	BASS	S15	CONT	MUTE	kHz
S16	-	-	-	S16	OFF	S16	S16	S16	S16	COMPU.REC	MEMO	MHz
S17	S17	S17	-	S17	ON	S17	S17	S17	S17	PRESET	(	ST
S18	S18	S18	-	S18	SLEEP	S18	S18	S18	S18	TR	⌒	MONO
S19	S19	S19	-	S19	REC	S19	S19	S19	S19	RANDOM	)	FADER
S20	S20	S20	REPEAT	S20	◷	S20	S20	S20	S20	MANUAL	▷	A
S21	S21	S21	ALL	S21	MPX	S21	S21	S21	S21	AUTO	◀	B
S22	S22	S22	ONE	S22		S22	S22	⬭	S22	PROG.	▶	B

Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Assignment	NL	NL	F1	NP	NL	G1	G2	G3	G4	G5	G6	G7	G8	G9	G10	G11	G12	H
Pin No.	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
Assignment	NL	NL	NL	NL	NL	NL	S22	S21	S20	S19	S18	S17	S16	S15	S1	S2	S3	S4
Pin No.	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52		
Assignment	S5	S6	S7	S8	S9	S10	S11	S12	S13	S14	D	NL	NP	F2	NL	NL		

F1, F2 : Filament G1-G12 : Grid S1-S22 : Anode NP : No Pin NL : No Lead
D : External connection to F2 H : Grid

IC & TRANSISTOR VOLTAGES

IC101 LA9240M

(V)

Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
PLAY	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.6
STOP	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Pin No.	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**
PLAY	2.8	2.5	2.5	2.5	2.6	2.5	0	2.4	2.4	2.5	2.5	2.8	2.5	2.7	2.3
STOP	2.5	2.5	2.5	2.5	2.5	2.5	0	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.3
Pin No.	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**
PLAY	2.3	0	0	4.9	0	1.5	0	0	0	0.8	2.4	2.4	2.5	2.5	0
STOP	2.3	0	0	4.9	5.0	4.8	0	4.9	0	0	1.6	2.4	2.4	2.5	0
Pin No.	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**
PLAY	2.5	2.5	0	0	2.3	4.5	0	0	4.9	0	5.0	2.5	2.5	2.5	2.6
STOP	2.5	2.5	0	0	2.3	4.8	4.8	0	0	0	5.0	2.5	2.5	0.9	0.9
Pin No.	**61**	**62**	**63**	**64**											
PLAY	2.3	3.9	0	5.0											
STOP	2.2	4.3	0	5.0											

IC102 LC78622N

(V)

Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
PLAY	0	0	1.6	0	1.6	5.0	0.3	0	2.5	2.5	0	0.9	0	0	0
STOP	0	0	0	0	1.6	5.0	0	0	2.5	2.4	0	0	0	4.9	0
Pin No.	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**
PLAY	1.7	0	5.0	0	0	2.4	5.0	5.0	4.9	1.5	0	0	1.8	0	0
STOP	4.9	4.9	4.9	0	0	2.4	0	4.9	4.8	2.4	0	0	2.4	0	4.9
Pin No.	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**
PLAY	2.4	0	0	0	0	5.2	2.1	0	0	2.1	5.2	0	5.0	2.0	2.0
STOP	2.4	0	0	0	4.9	5.2	2.1	0	0	2.1	5.2	4.9	4.9	2.0	2.0
Pin No.	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**
PLAY	0	0.1	0	0.1	0	0.9	2.5	0.9	0	0	0	4.5	4.8	0	2.2
STOP	0	0.1	2.2	0	2.5	1.3	2.5	0	0	0	4.8	4.8	4.8	0	2.1
Pin No.	**61**	**62**	**63**	**64**											
PLAY	2.2	0	0	0											
STOP	2.2	0	0	0											

IC103 LA6541

(V)

Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
PLAY	8.3	0	2.7	2.5	4.1	3.5	3.5	4.1	2.5	2.7	5.0	7.7	5.0	5.0	2.6
STOP	8.6	4.8	2.5	2.5	2.5	3.9	3.8	4.0	2.5	2.5	5.0	7.8	5.0	5.0	2.5
Pin No.	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**						
PLAY	6.3	3.8	3.9	3.8	3.9	2.5	2.5	2.5	8.4						
STOP	2.5	3.9	3.9	3.9	3.8	2.5	2.5	2.5	8.4						

IC131 TA7291S

(V)

Pin No.	1	2	3	4	5	6	7	8	9						
DR-OPEN	4.8	11.5	7.4	0	0	11.0	0.7	6.7	0						
DR-CLOSE	0	11.5	0.7	0	0	11.0	7.4	6.7	4.8						
STOP	4.8	11.5	0.6	0	0	11.4	0.6	6.7	4.8						

IC132 TA7291S

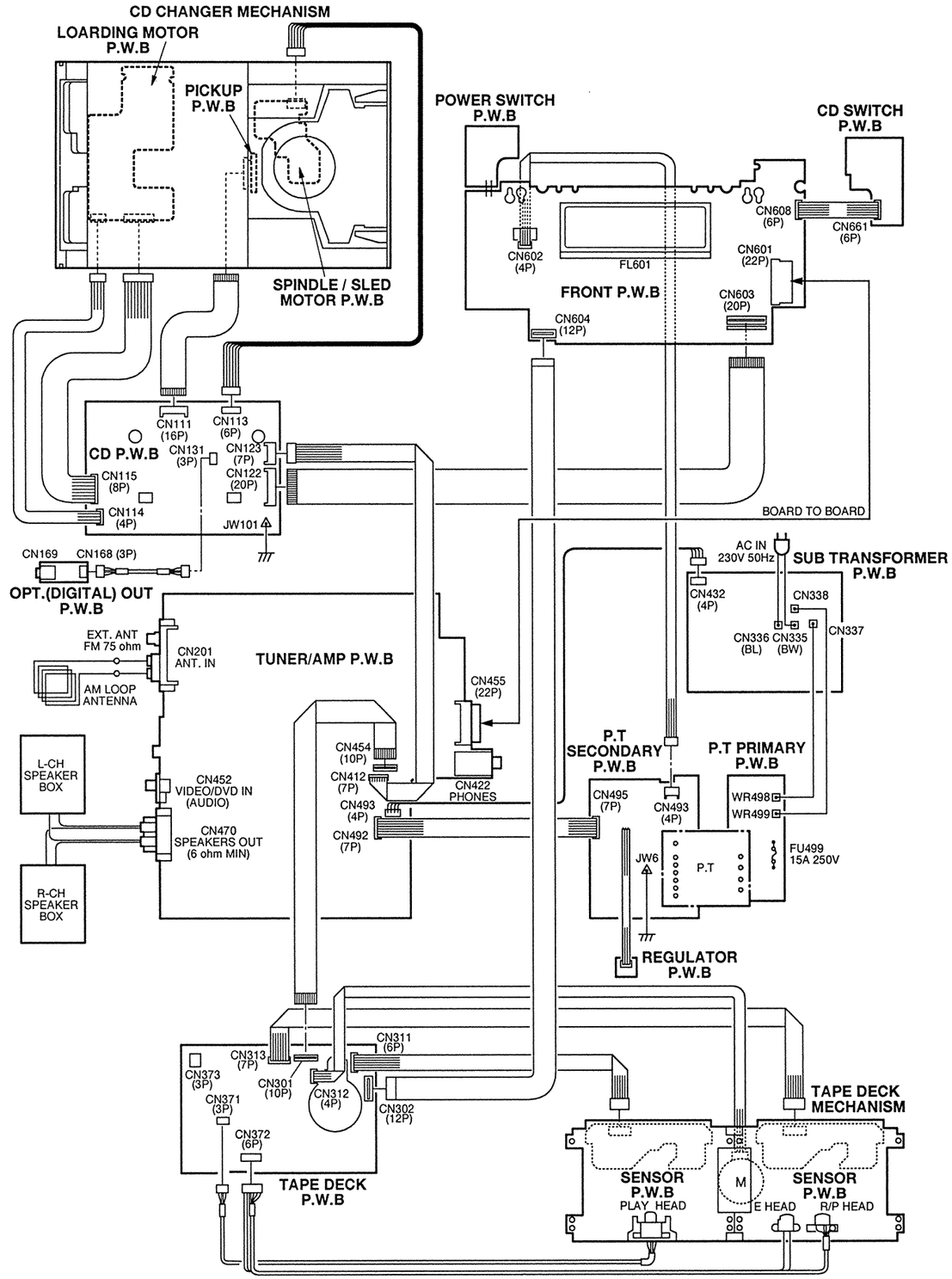
(V)

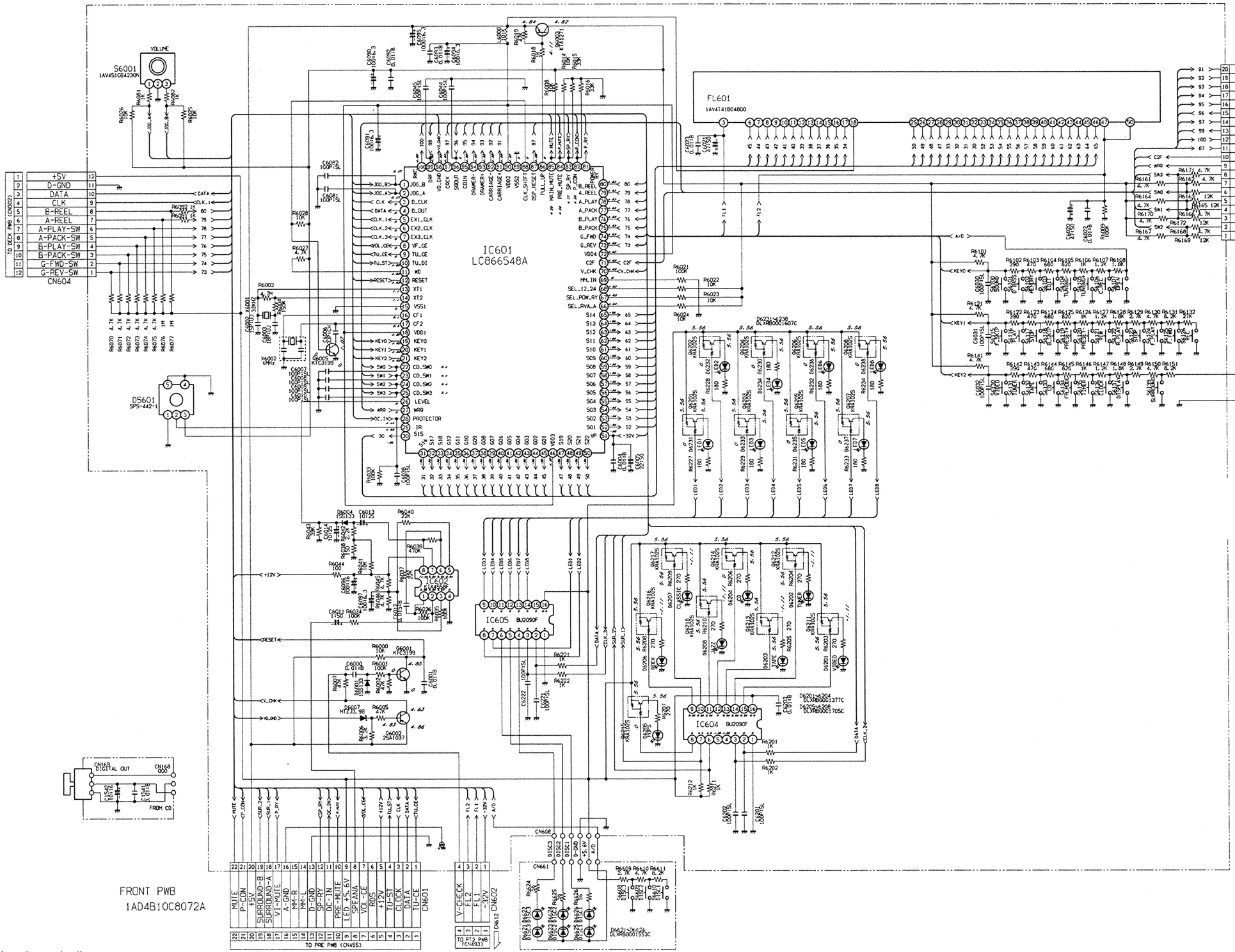
Pin No.	1	2	3	4	5	6	7	8	9						
CA-OPEN	0	11.5	0.7	0	0	11.0	6.3	5.6	4.8						
CA-CLOSE	4.8	11.5	6.3	0	0	11.0	0.7	5.6	0						
STOP	4.8	11.5	0.6	0	0	11.4	0.6	5.6	4.8						

TRANSISTORS

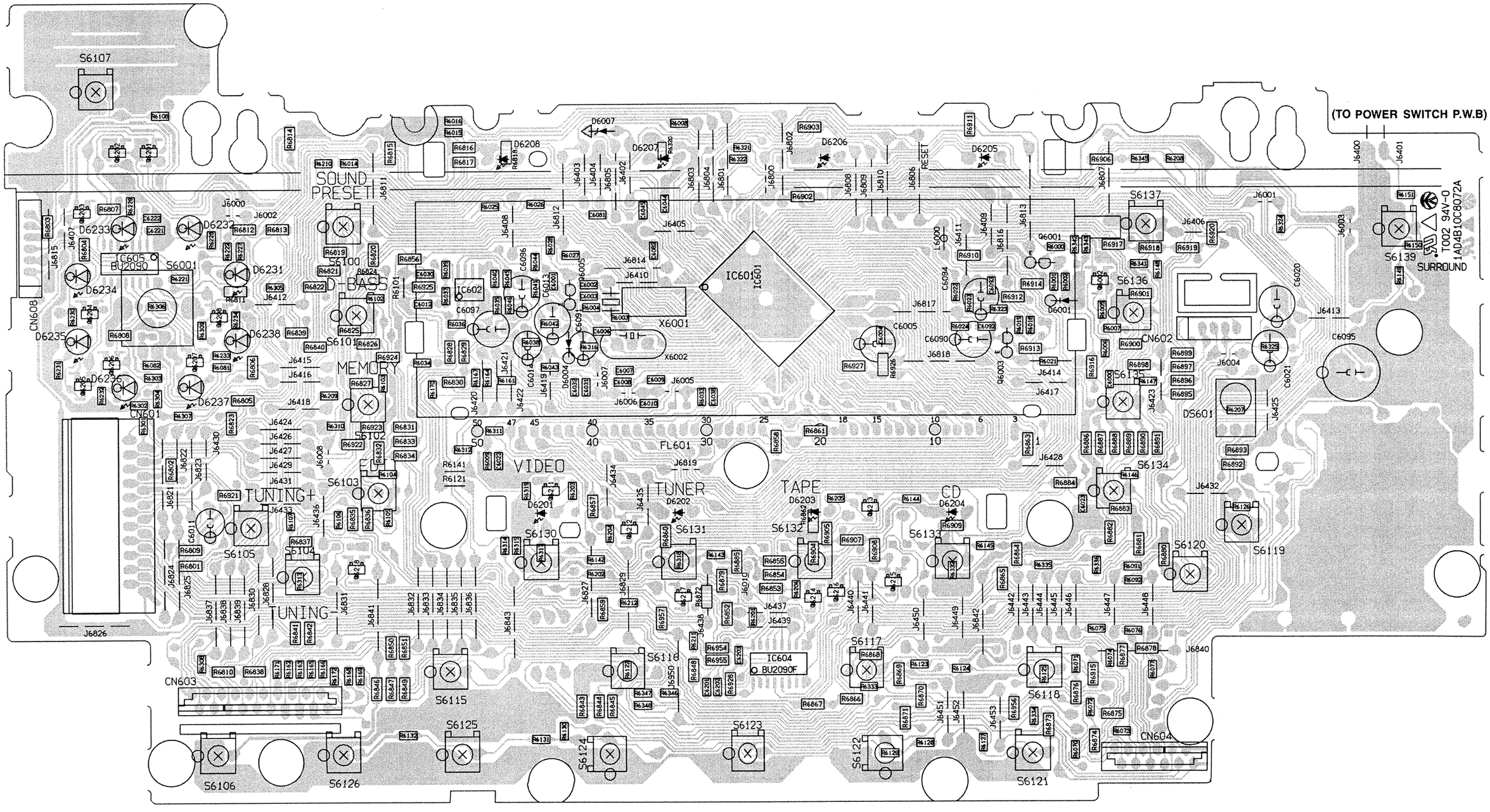
PIN	Q1301			Q1401		
NAME	B	C	E	B	C	E
PLAY	4.5	1.9	3.9	8.2	5.0	5.0
STOP	4.9	1.6	4.3	8.3	5.0	7.7

WIRING CONNECTION

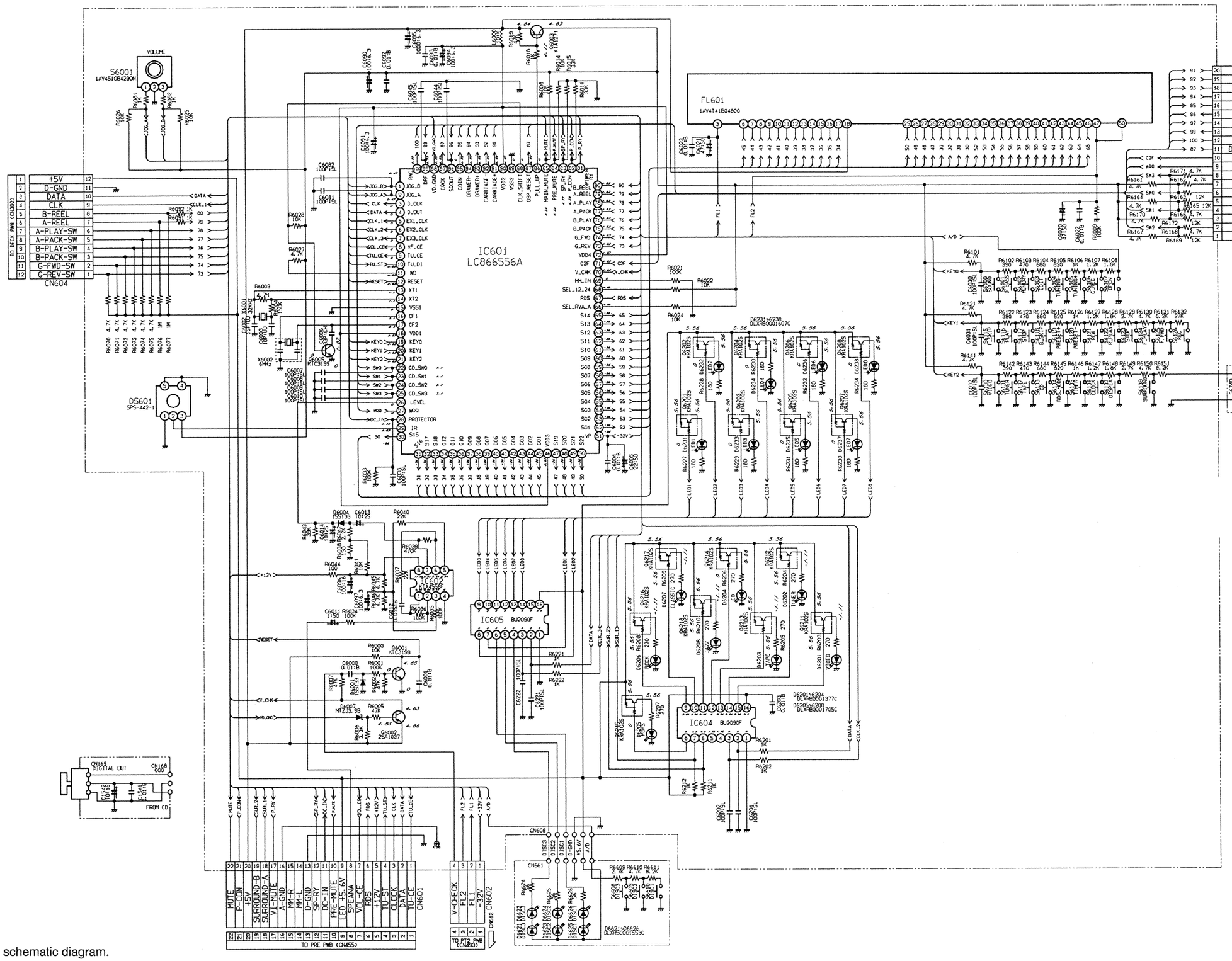




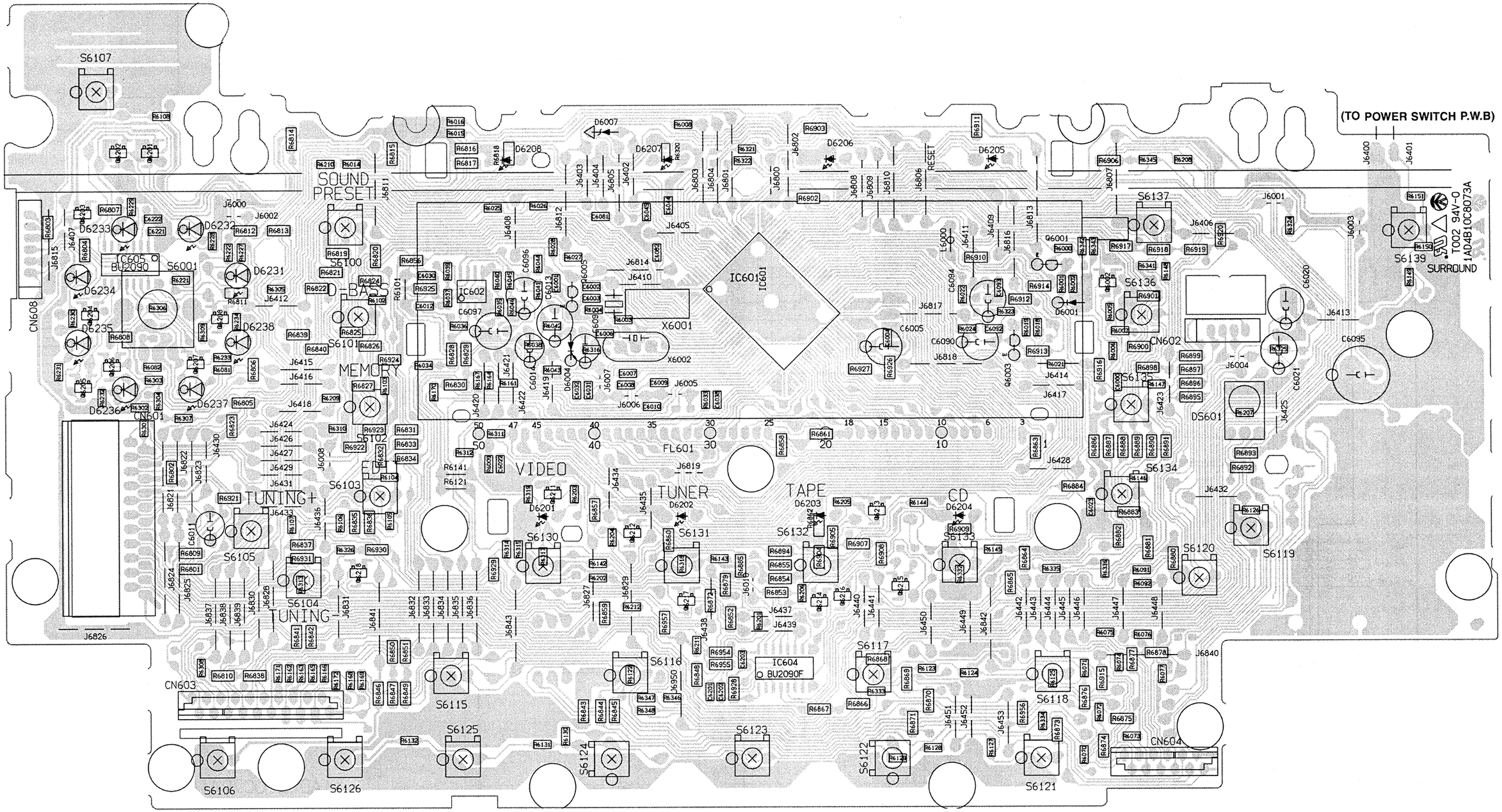
This is a basic schematic diagram.


(TO POWER SWITCH P.W.B)
T002 94V-0
1AD4B10C8072A
S6107
SOUND PRESET
S6100
D-BASS
S6101
MEMORY
S6102
TUNING+
S6105
TUNING
S6106
S6103
S6104
VIDEO
TUNER
TAPE
CD
S6130
S6131
S6132
S6133
S6134
S6135
S6136
S6137
S6139
SURROUND
S6120
S6119
S6121
S6122
S6123
S6124
S6125
S6126
S6115
S6116
S6117
S6118
IC601
IC602
IC604
BU2090F
IC605
BU2090
X6001
X6002
FL601
DS601
CN601
CN602
CN603
CN604
D6232
D6233
D6234
D6235
D6236
D6237
D6238
D6231
D6207
D6208
D6206
D6205
D6201
D6202
D6203
D6204
Q6001
Q6003
S6001

SCHEMATIC DIAGRAM (FRONT . . . for XE)



This is a basic schematic diagram.


(TO POWER SWITCH P.W.B)
SOUND PRESET
D-BASS
MEMORY
TUNING+
TUNING
VIDEO
TUNER
TAPE
CD
SURROUND
RESET
IC601
IC602
IC604
BU2090F
X6001
X6002
FL601
S6100
S6101
S6102
S6103
S6104
S6105
S6106
S6107
S6115
S6116
S6117
S6118
S6119
S6120
S6121
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S6124
S6125
S6126
S6130
S6131
S6132
S6133
S6134
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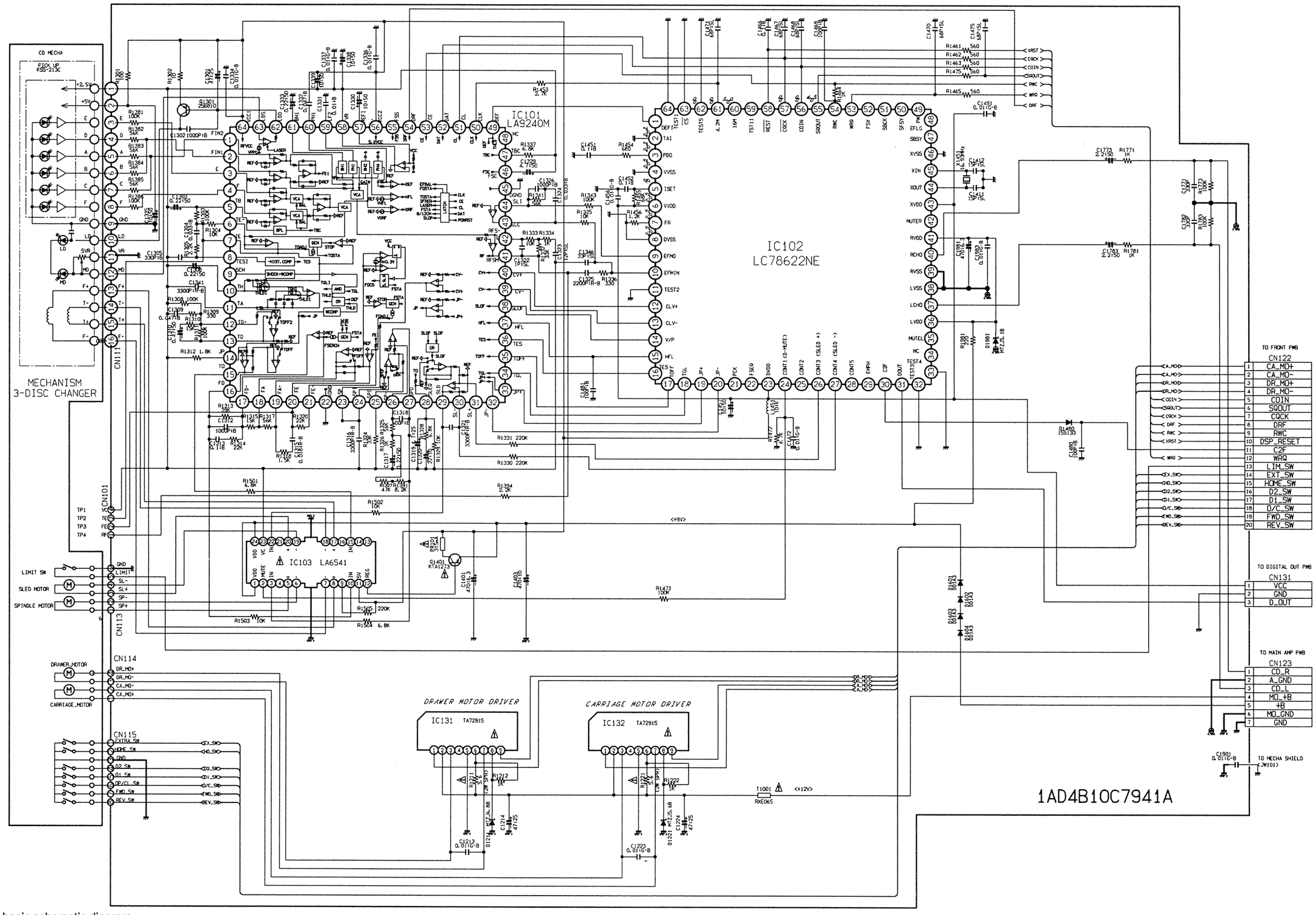
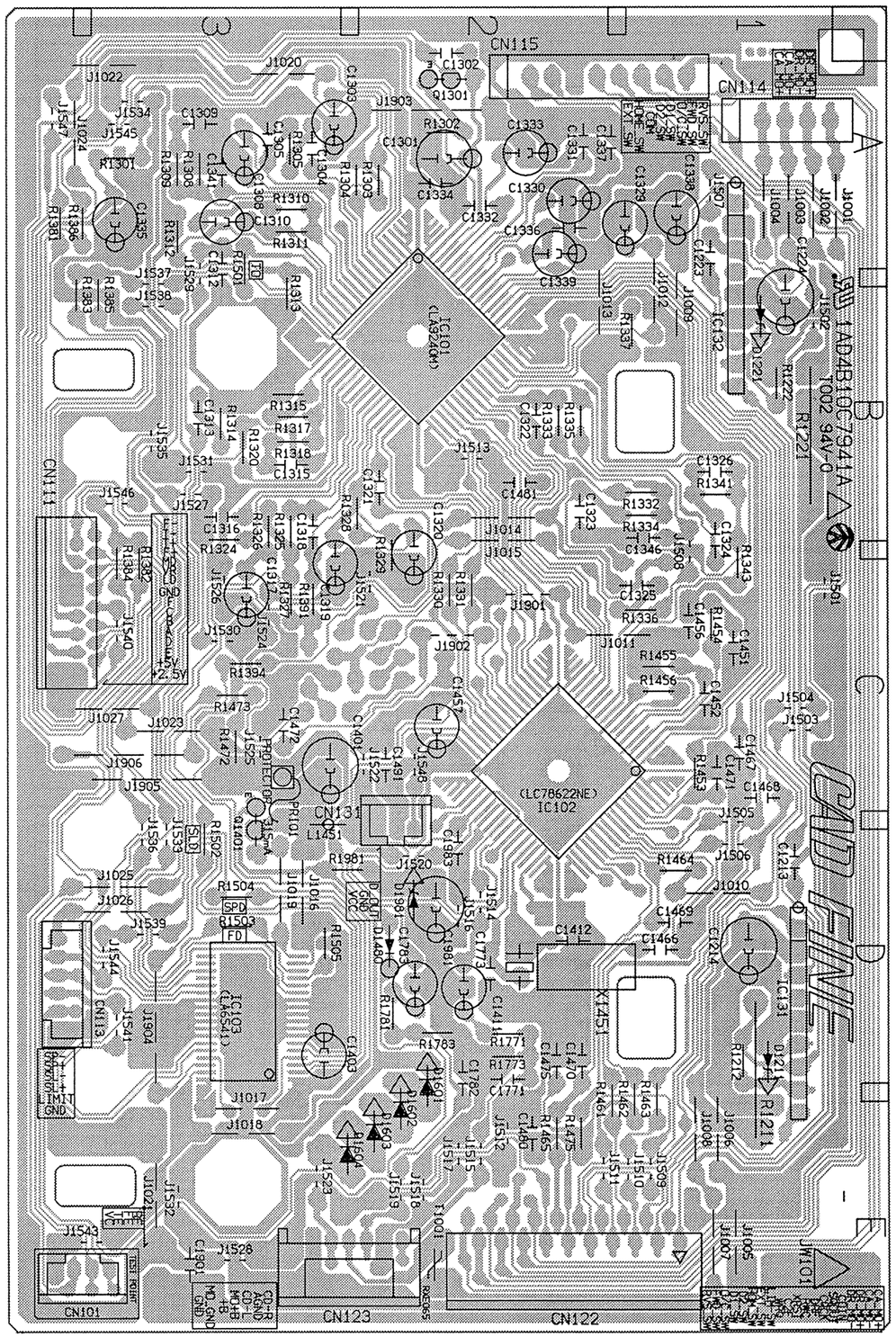
S6136
S6137
S6139
CN601
CN602
CN603
CN604
DS601
D6231
D6232
D6233
D6234
D6235
D6236
D6237
D6238
D6201
D6202
D6203
D6204
D6205
D6206
D6207
D6208
Q6001
T002 94V-0
1AD4B10C8073A

SCHEMATIC DIAGRAM (CD)

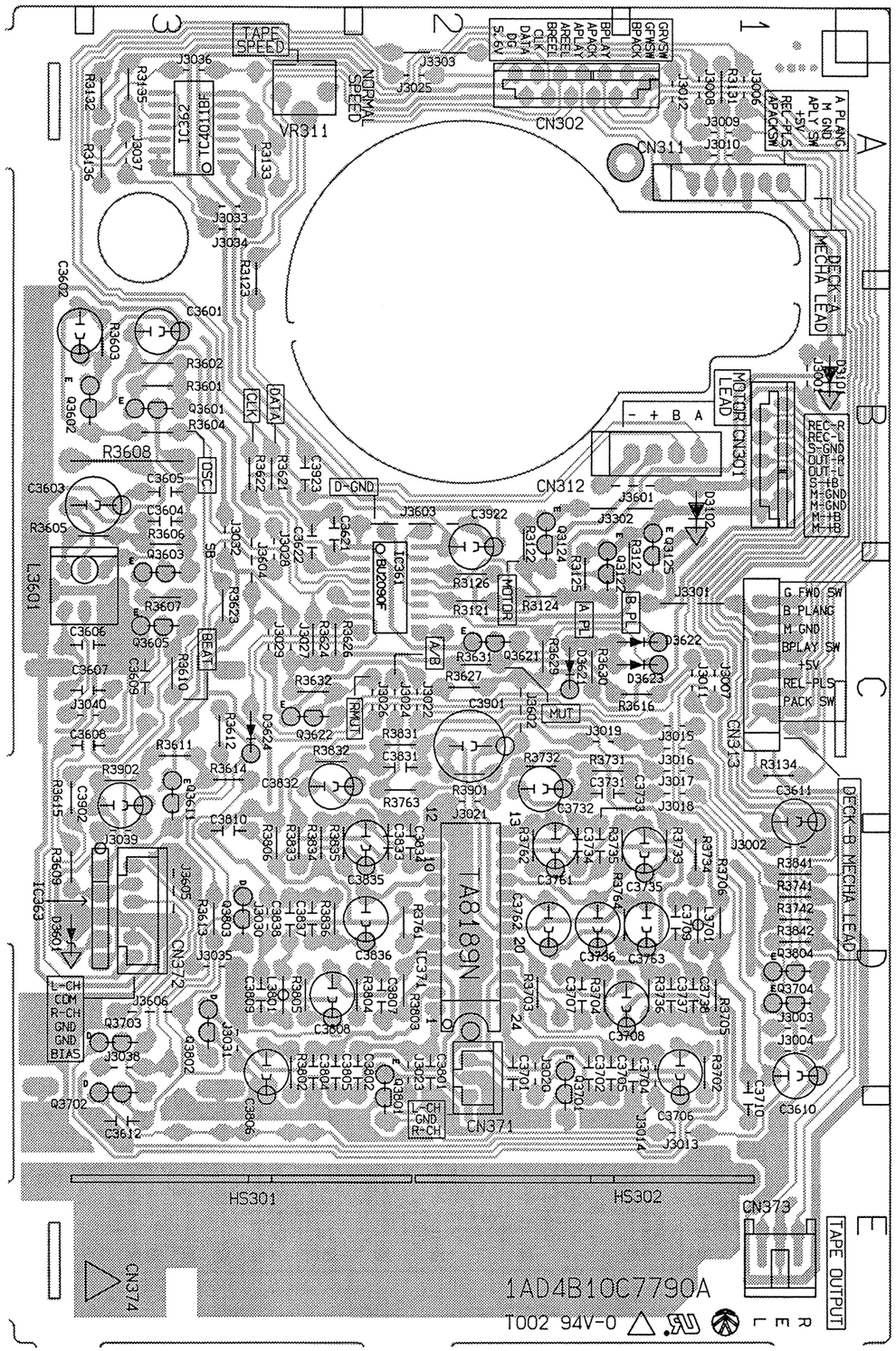


This is a basic schematic diagram.

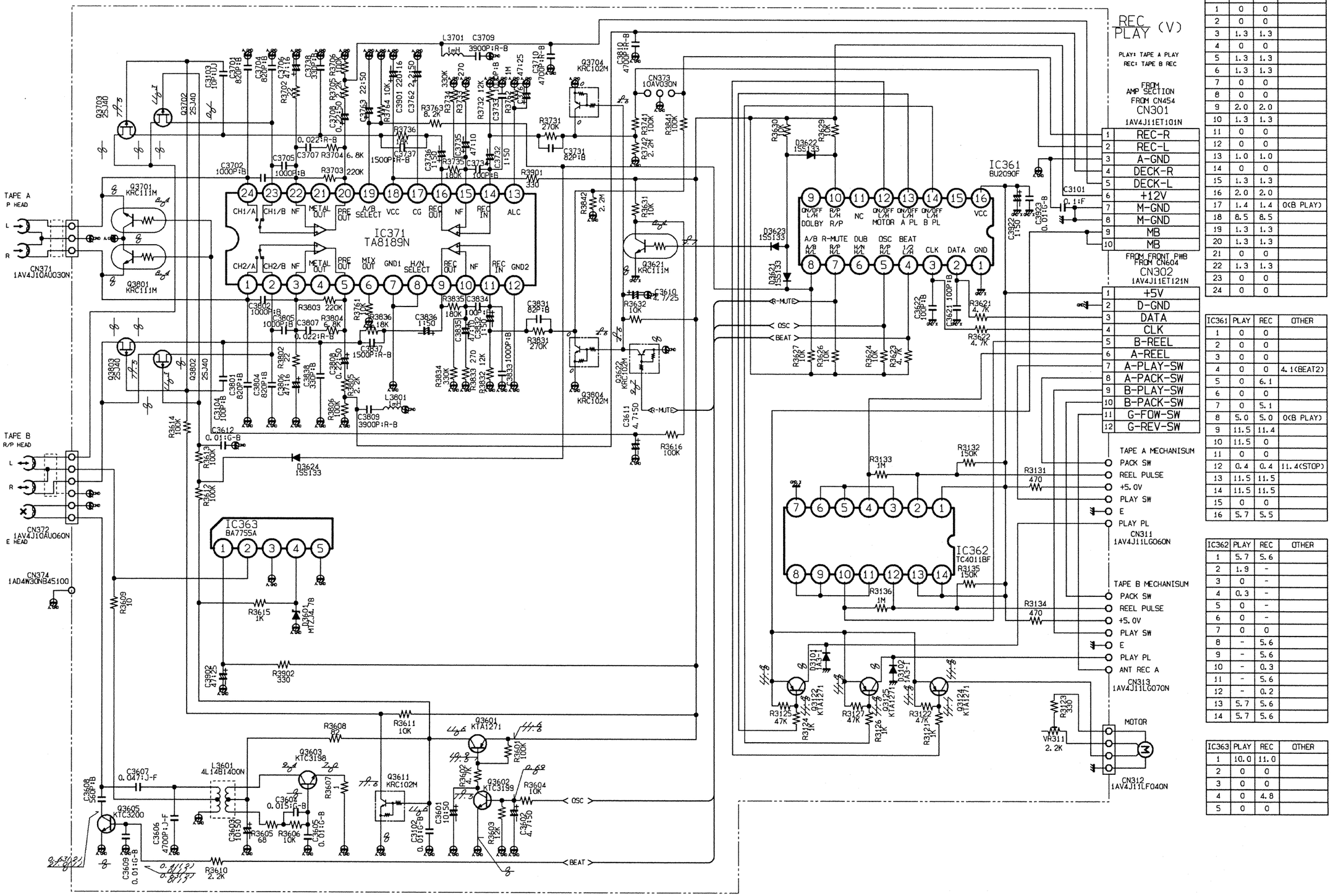
WIRING DIAGRAM (CD)



WIRING DIAGRAM (DECK)



SCHEMATIC DIAGRAM (DECK)



IC371	PLAY	REC	OTHER
1	0	0	
2	0	0	
3	1.3	1.3	
4	0	0	
5	1.3	1.3	
6	1.3	1.3	
7	0	0	
8	0	0	
9	2.0	2.0	
10	1.3	1.3	
11	0	0	
12	0	0	
13	1.0	1.0	
14	0	0	
15	1.3	1.3	
16	2.0	2.0	
17	1.4	1.4	0(B PLAY)
18	8.5	8.5	
19	1.3	1.3	
20	1.3	1.3	
21	0	0	
22	1.3	1.3	
23	0	0	
24	0	0	

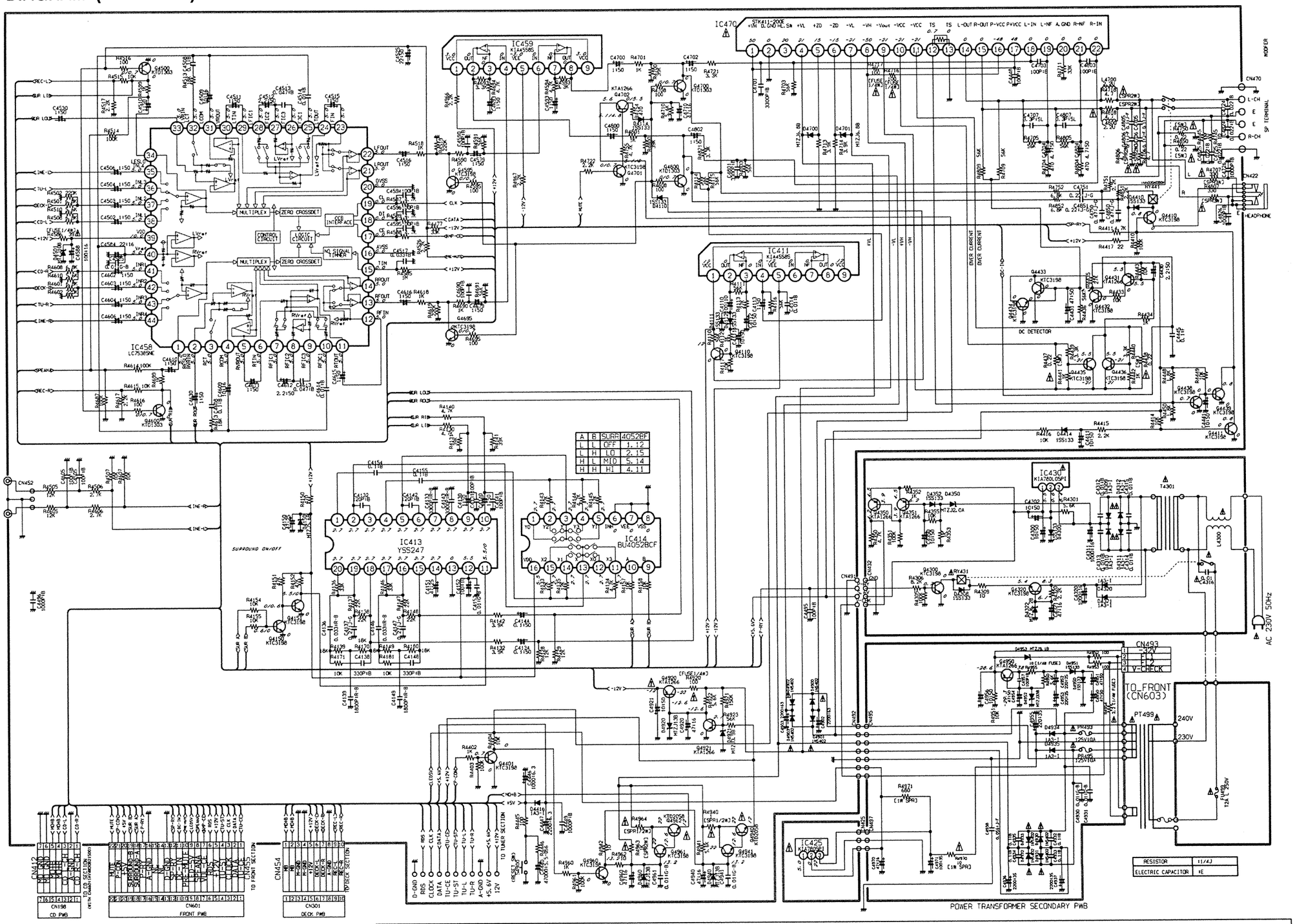
IC361	PLAY	REC	OTHER
1	0	0	
2	0	0	
3	0	0	
4	0	0	4.1(BEAT2)
5	0	6.1	
6	0	0	
7	0	5.1	
8	5.0	5.0	0(B PLAY)
9	11.5	11.4	
10	11.5	0	
11	0	0	
12	0.4	0.4	11.4(STOP)
13	11.5	11.5	
14	11.5	11.5	
15	0	0	
16	5.7	5.5	

IC362	PLAY	REC	OTHER
1	5.7	5.6	
2	1.9	-	
3	0	-	
4	0.3	-	
5	0	-	
6	0	-	
7	0	0	
8	-	5.6	
9	-	5.6	
10	-	0.3	
11	-	5.6	
12	-	0.2	
13	5.7	5.6	
14	5.7	5.6	

IC363	PLAY	REC	OTHER
1	10.0	11.0	
2	0	0	
3	0	0	
4	0	4.8	
5	0	0	

This is a basic schematic diagram.

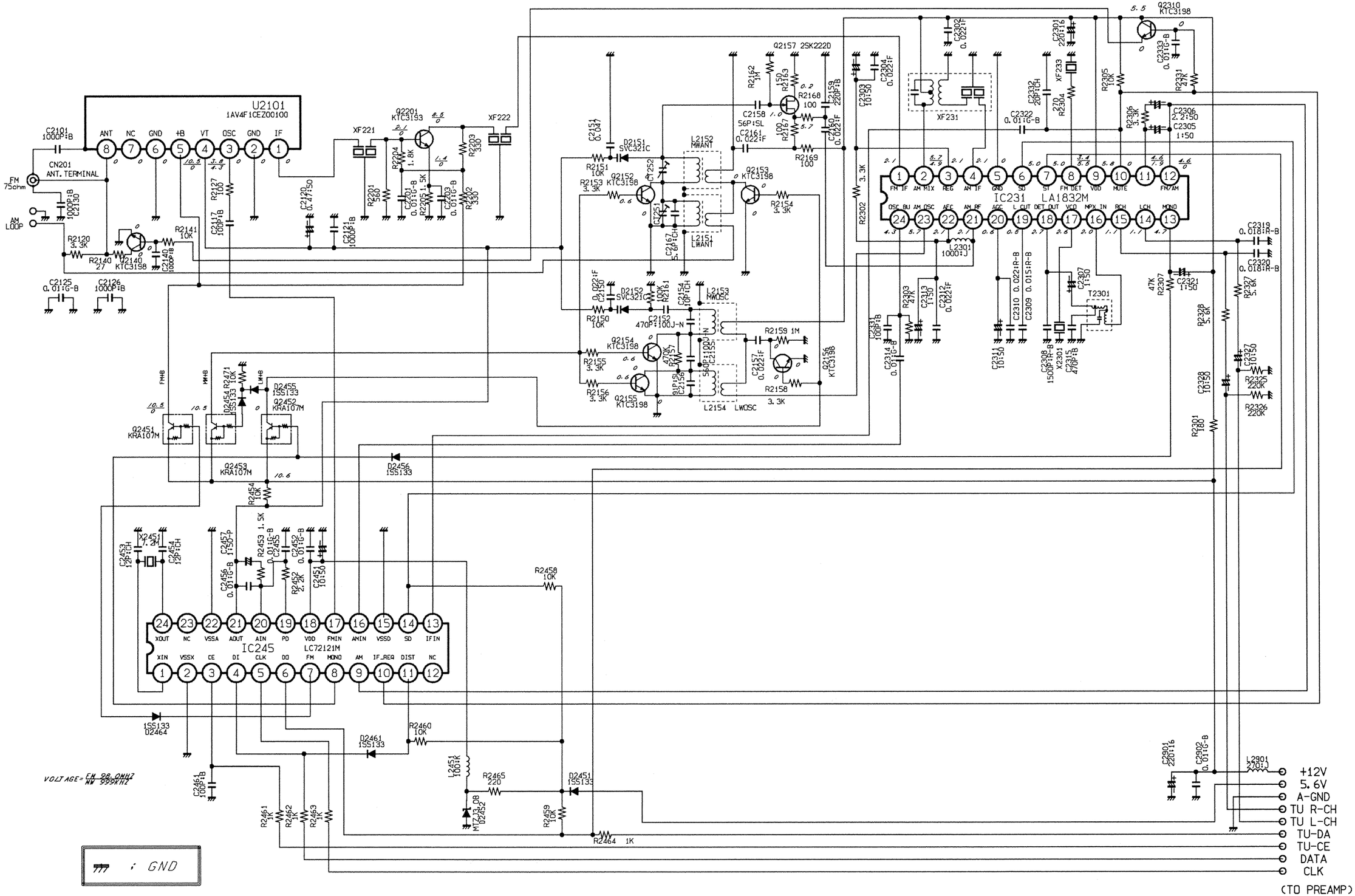
SCHEMATIC DIAGRAM (AMPLIFIER)

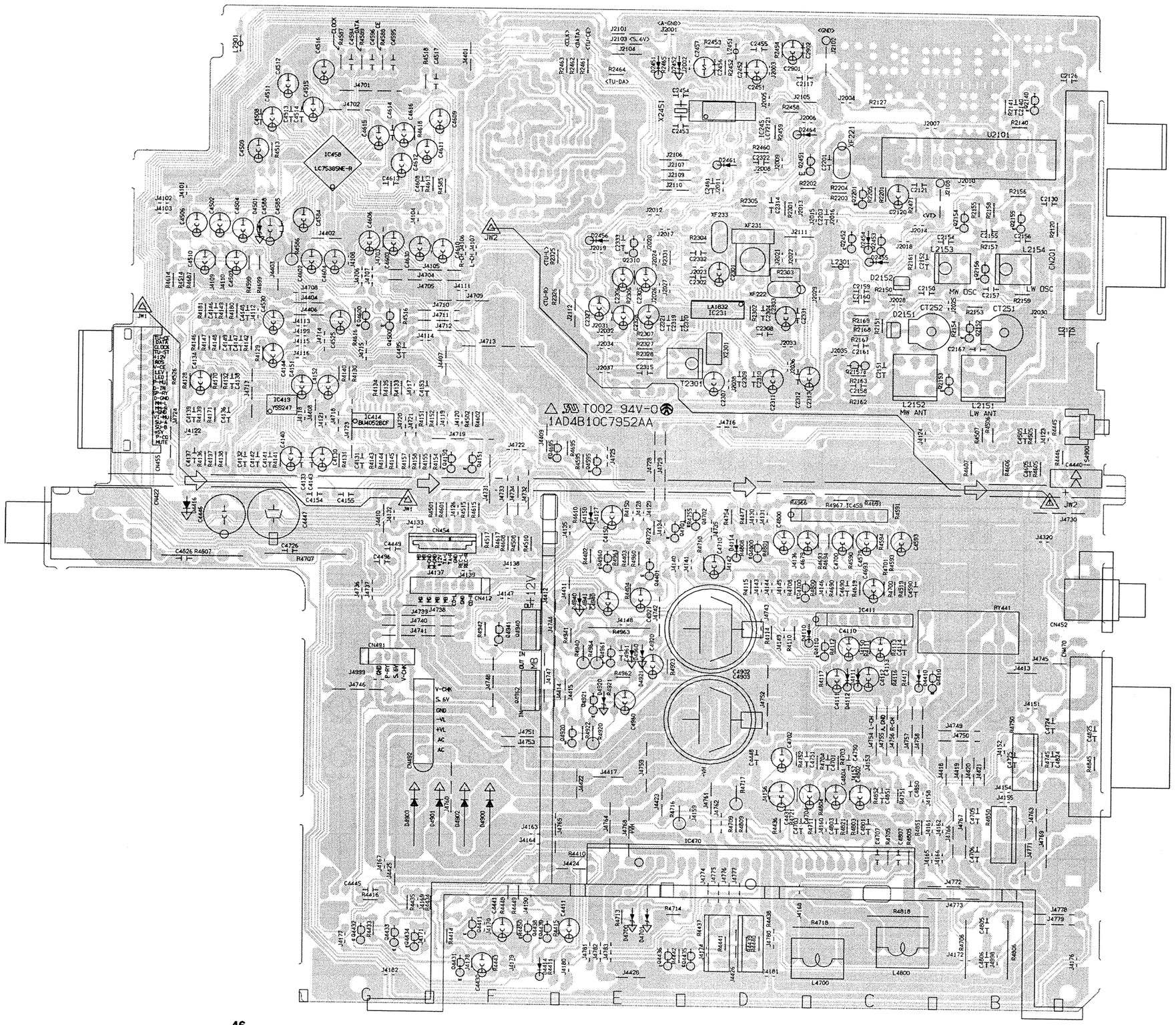


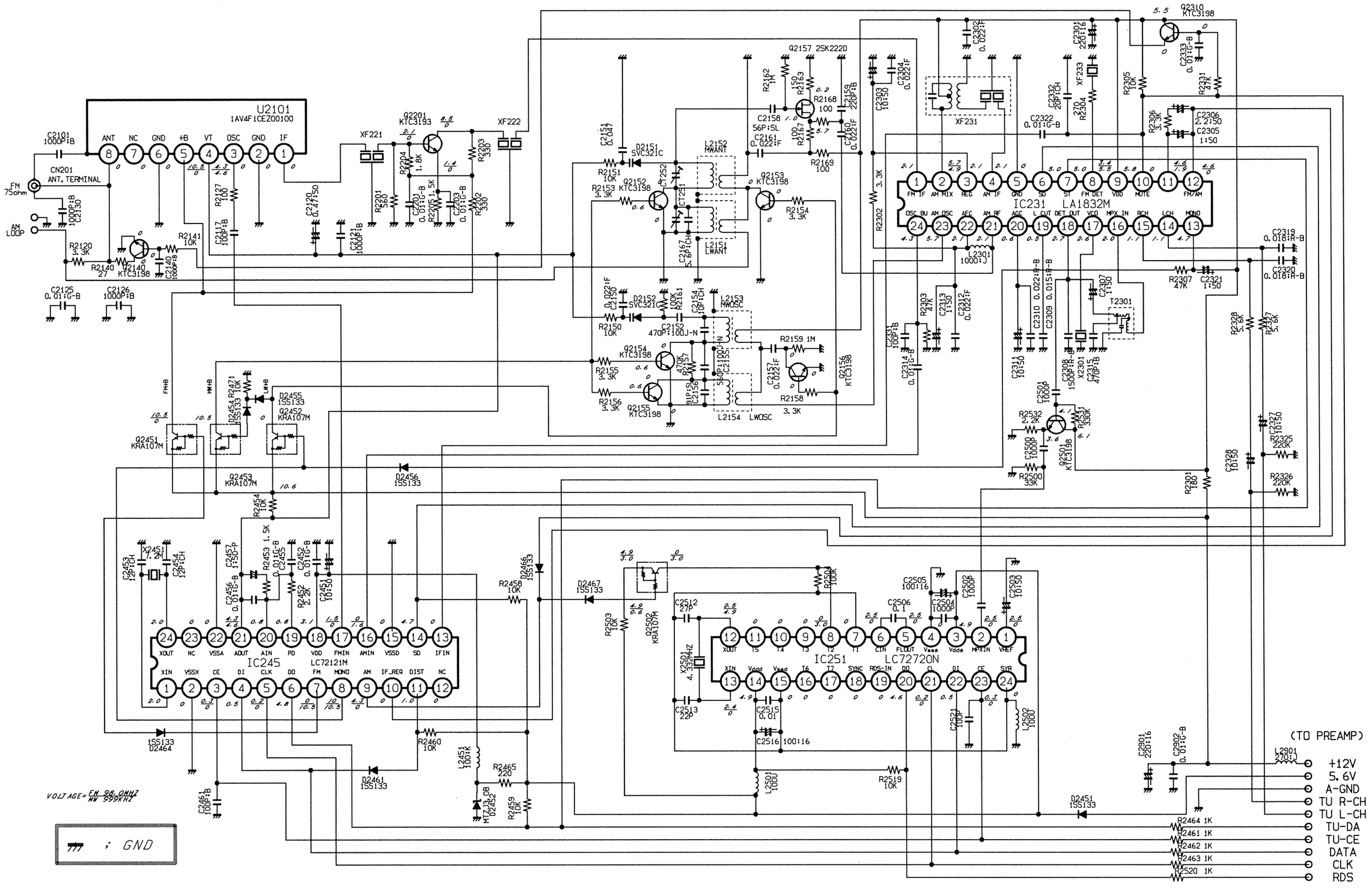
PRODUCT SAFETY NOTICE

Each precaution in this manual should be followed during servicing. Components identified with the IEC symbol ⚠ in the parts list and the schematic diagram designated components in which safety can be of special significance. When replacing a component identified by ⚠ , use only the replacement parts designated, or parts with the same ratings of resistance, wattage or voltage that are designated in the parts list in this manual. Leakage-current or resistance measurements must be made to determine that exposed parts are acceptably insulated from the supply circuit before returning the product to the customer.

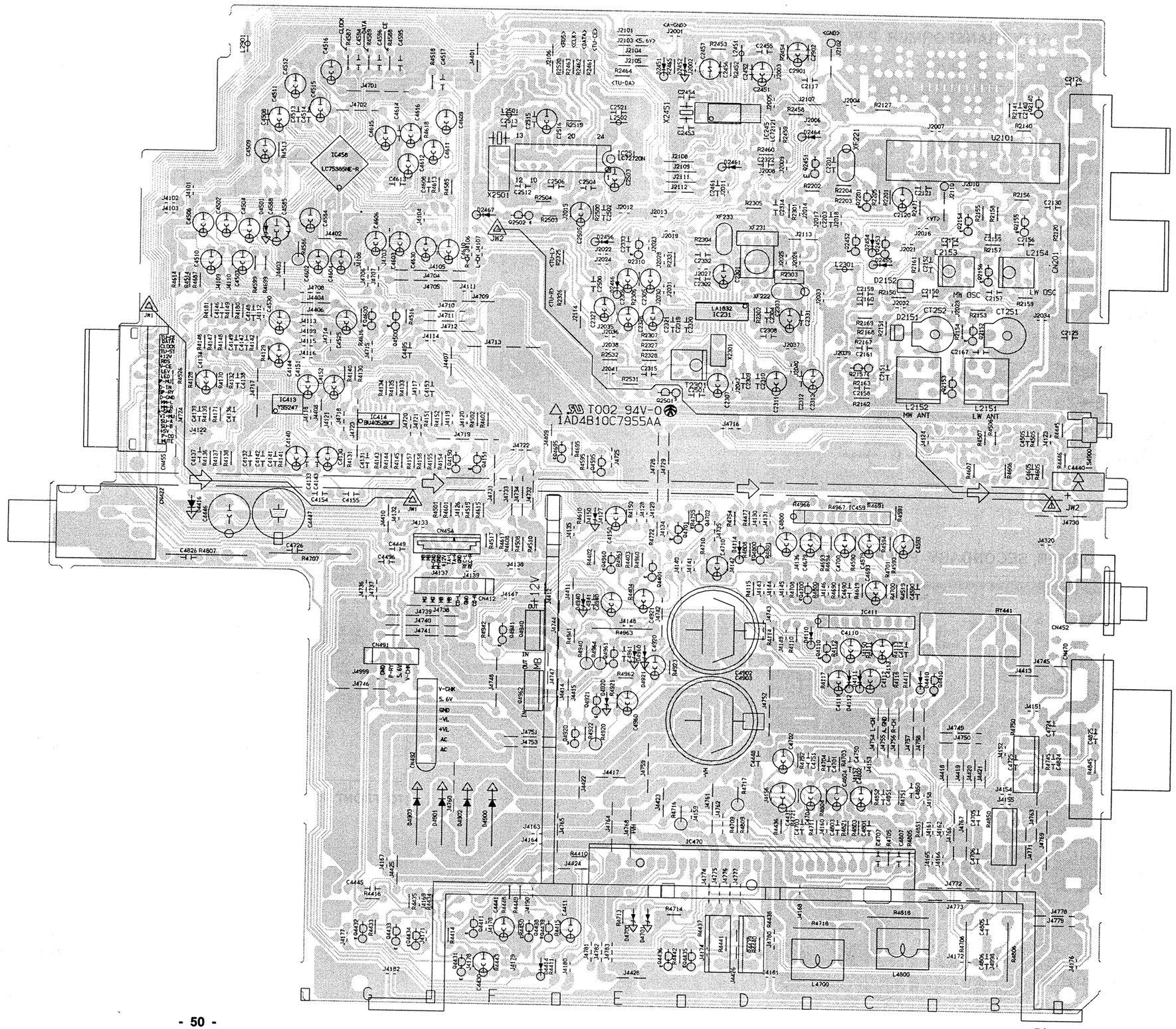
This is a basic schematic diagram.


U2101
1AV4F1CEZ00100
ANT NC GND +B VT OSC GND IF
CN201
ANT. TERMINAL
FM 75ohm
AM LOOP
IC231 LA1832M
FM IF AM MIX REG ANT IF GND SD ST FM DET VDD MUTE FM/AM
OSC BU AM OSC AFC AM RF AGC L OUT DET OUT VCO MPX IN RCH LCH MONO
IC245
LC72121M
XOUT NC VSSA ADJT AIN PD VDD FMIN AMIN VSSD SD IFIN
XIN VSSX CE DI CLK DO FM MONO AM IF_REQ DIST NC
Q2157 2SK222D
L2152 MWANT
L2151 LWANT
L2153 MWOSC
L2154 LWOSC
T2301
L2301 1000J
XF231
XF221
XF222
X2451 4.5M
VOLTAGE= FM 98.0MHz AM 999KHz
: GND
+12V
5.6V
A-GND
TU R-CH
TU L-CH
TU-DA
TU-CE
DATA
CLK
(TO PREAMP)


T002 94V-0
1AD4B10C7952AA
IC458
LC75385NE-R
IC419
IC411
IC470
IC231
LA1832
U2101
L2154
L2153
L2152
L2151
L4700
L4800
CT252
CT251
MW OSC
LW OSC
MW ANT
LW ANT
CN201
CN452
CN454
CN491
CN492
CN470
JW1
JW2
BLT+12V
V-CHK
S.6V
GND
-VL
+VL
AC
AC
IN
OUT
MB

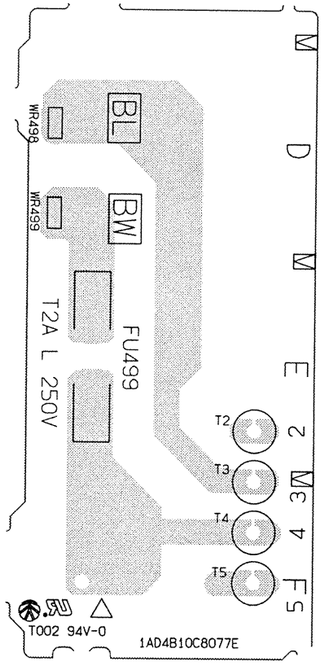


This is a basic schematic diagram.

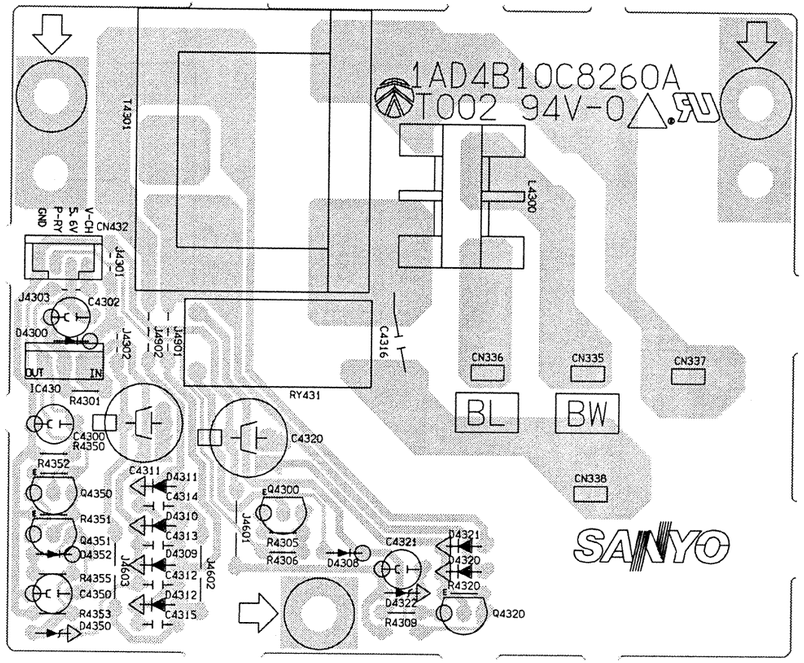

T002 94V-0
1AD4B10C7955AA
IC456
LC75385NE-R
IC459
IC411
IC470
IC414
BU4052BCF
IC419
YSS247
LA1832
IC231
U2101
RT441
CN452
CN454
CN491
CN470
CN201
CN412
MW OSC
LW OSC
MW ANT
LW ANT
CT252
CT251
L2152
L2151
L2153
L2154
L4700
L4800
D2152
D2151
X2451
X2501
X2301
XF221
XF231
XF233
XF222
JW1
JW2
BT +12V
V-CHK
5.6V
GND
-VL
+VL
AC
AC
P-ON
V-CHK
5.6V
GND
MB
IN
OUT
TU-DA
CLOCK
DATA
CE
CLK
<A-GND>
<GND>
<5.6V>
<VT>
<TU-DA>
G F E D C B

WIRING DIAGRAM (POWER TRANSFORMER)

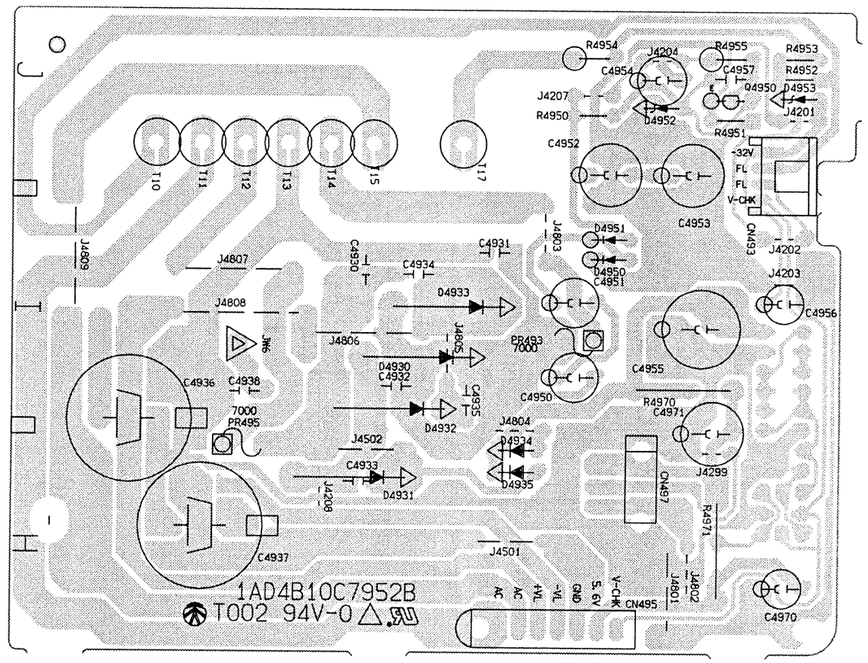
POWER TRANSFORMER, PRIMARY P.W.B



SUB TRANSFORMER P.W.B

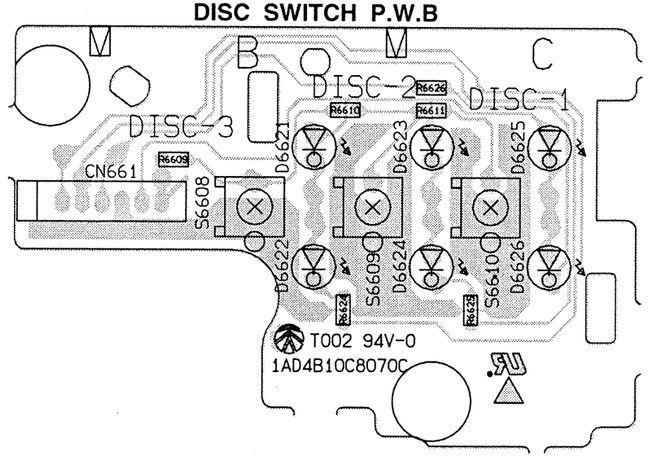


POWER TRANSFORMER, SECONDARY P.W.B

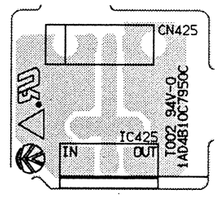


WIRING DIAGRAM (POWER SWITCH, DISC SWITCH, and e.t.c.)

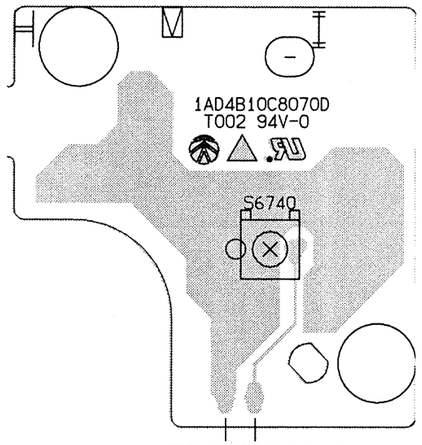
DISC SWITCH P.W.B



REGULATOR P.W.B

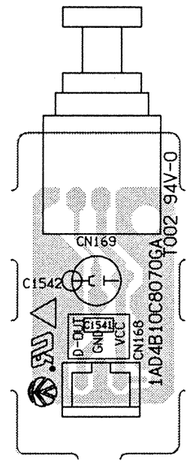


POWER SWITCH P.W.B



(TO FRONT P.W.B)

DIGITAL OUT P.W.B



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